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MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL RAILROAD AND FINANCIAL NEWSPAPER.

WEALTH IN SOUTHERN MINERALS.

The people who are now investing their money in Southern properties are doing so intelligently, and there is every reason to believe that they will receive good returns in due season. The South is rich in minerals of all kinds, and her progress in development within the past ten or fifteen years has been rapid; but even so, the surface of her store of mineral wealth has scarcely been scratched. Iron ore and coal figure most prominently in this recent development; but there are gold fields in Georgia and elsewhere which were formerly operated successfully, and which, though now long neglected, are certain again to yield up their hidden treasures as soon as the capital shall be forthcoming for their operation under modern methods. There are several rare minerals found in the South which are even now being profitably mined. Among these are the refractory elements from which incandescent gas mantles are made, and also the mineral called bauxite, from which alum and aluminium are obtained.—Philadelphia Record.

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No. 26.

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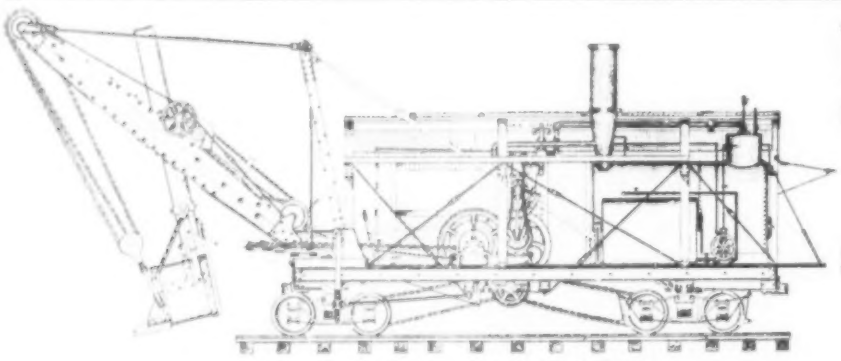

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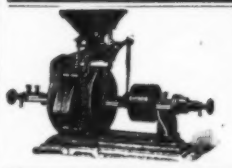

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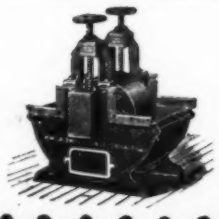

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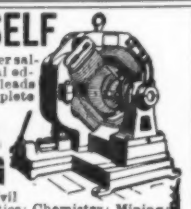

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Birmingham Boiler Wks., Birmingham, Ala.
Tudor Boiler Mfg. Co., Cincinnati, O.
Valk & Murdoch Iron Wks., Charleston,S.C.

Tanks. (Wood.)
G. M. Davis & Son, Palatka, Fla.
H. F. Lewis & Co., Ltd., New Orleans, La.

Tarred Goods.
C. S. Garrett & Son, Philadelphia, Pa.

Telephones.
Henry A. Colt, St. Louis, Mo.
The Rawson Electric Co., Elyria, O.

Telephones & Telephone Apparatus.
Henry A. Colt, St. Louis, Mo.

Terne Plate.
Aetna Stand. Iron & Steel Co.,Bridgeport,O.
C. M. Gilbert & Co., Savannah, Ga.

Terra Cotta.
Pomona Terra Cotta Co., Pomona, N. C.
V. H. Kriegshaber, Atlanta, Ga.

Textile Machinery. [See Cotton-Mill Machinery.]
Fairmount Machine Co., Philadelphia, Pa.
J. A. Gowdey & Son, Providence, R. I.
Crompton & Knowles Loom Works, Worcester, Mass.
Curtis & Marble Mch. Co., Worcester, Mass.
Lowell Machine Shop, Lowell, Mass.
American Supply Co., Providence, R. I.
Draper Co., Hopedale, Mass.
Whitinsville Spin. Ring Co., Whitins'e,Mass.
Mason Machine Works, Taunton, Mass.
Charlotte Machine Co., Charlotte, N. C.
Kilburn, Lincoln & Co., Fall River, Mass.
Providence Machine Co., Providence, R. I.
Easton & Burnham Mch. Co.,Pawtucket,R.I.

Tinplate.
Aetna Stand. Iron & Steel Co.,Bridgeport,O.

Tobacco Machinery.
Cardwell Machine Co., Richmond, Va.
Buckeye Iron and Brass Works, Dayton, O.

Tools. (Machinists' and Mechanics'.)
Brown & Sharpe Mfg. Co., Providence, R. I.
The Tampograph Co., Wilmington, Del.
Morse Twist Drill & Mch. Co., New Bedford, Mass.
Hammacher, Schlemmer & Co., New York.
Fifield Tool Co., Lowell, Mass.
Chas. H. Besly & Co., Chicago, Ill.
Henry B. Pancoast & Co., Philadelphia, Pa.

Tools. (Bicycle and Electrical.)
Toledo Machine & Tool Works, Toledo, O.
E. W. Bliss Co., 137 Plymouth street, Brooklyn, N. Y.

Tools. (Tinners'.)
Niagara Machine & Tool Wks., Buffalo, N.Y.

Torch. (Contractors'.)
Wells Light Mfg. Co., New York, N. Y.

Towns.
Charleston, S. C.

Tramway. (Overhead.)
Cohoes Iron Fdry. & Mch. Co., Cohoes, N. Y.
Coburn Trol. Track Mfg. Co., Holyoke,Mass.

Trust Companies. [See Bankers and Brokers.]

Tube Expanders.
Joseph F. McCoy Co., New York, N. Y.

Tubing.
The Ludlow-Saylor Wire Co., St. Louis, Mo.
Chas. H. Besly & Co., Chicago, Ill.

Turbines. [See Water Wheels.]

Valve. (Slide.)
The American Balance Slide Valve Co., Jersey Shore, Pa.

Valves.
A. A. Griffing Iron Co., New York, N. Y.
Frontier Iron Works, Detroit, Mich.
John Featherstone's Sons, Chicago, Ill.
The Fred W. Wolf Co., Chicago, Ill.
Boston Belting Co., Boston, Mass.
Crosby St. Gage & Valve Co., Boston, Mass.
The Lunkenheimer Co., Cincinnati, O.
Mason Regulator Co., Boston, Mass.
Chapman Valve Mfg. Co., Indian Orchard, Mass.
N.J.Car Spring & Rub. Co., Jersey City, N.J.
R. D. Wood & Co., Philadelphia, Pa.
Jenkins Bros., New York, N. Y.
Ludlow Valve Mfg. Co., Troy, N. Y.
Broomell, Schmidt & Co., Ltd., York, Pa.

Veneer Machines.
The E. D. Albro Co., Cincinnati, O.

Wagon Builders' Mchy. & Supplies.
Cordesman Machine Co., Cincinnati, O.
Cordesman, Meyer & Co., Cincinnati, O.
H. L. Beach, Montrose, Pa.
J. A. Fay & Co., Cincinnati, O.
The Egan Co., Cincinnati, O.

Wall Ties. (Steel.)
The Cleveland Wire Spring Co., Cleveland,O.

Washers. (Ore and Phosphate.)
McLanahan & Stone, Hollidaysburg, Pa.
Valk & Murdoch Iron Wks., Charleston, S.C.
Cameron & Barkley Co., Charleston, S. C.
The Bailey-Lebby Co., Charleston, S. C.

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Columbia Water Power Co., Columbia, S. C.

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James Leffel & Co., Springfield, O.
Lane Mfg. Co., Montpelier, Vt.
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Stilwell-Bierce & Smith-Vaile Co.,Dayton,O.
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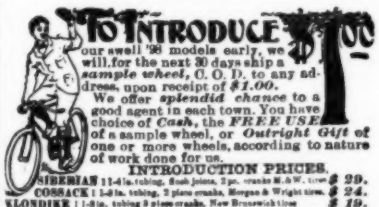

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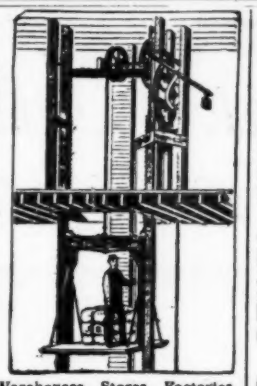

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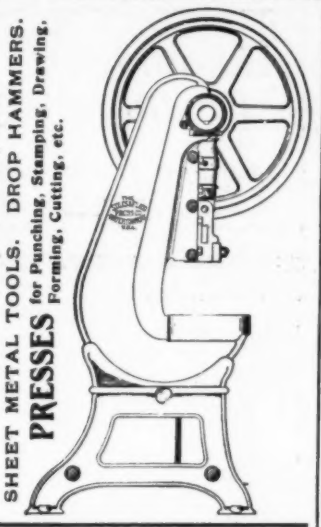

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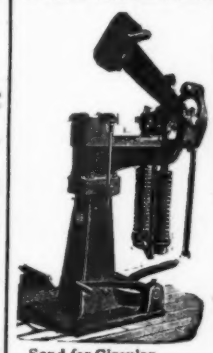

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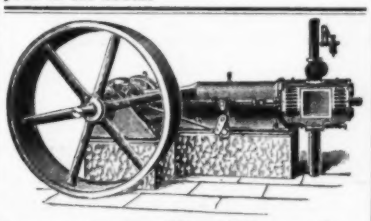

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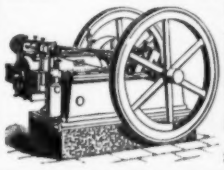

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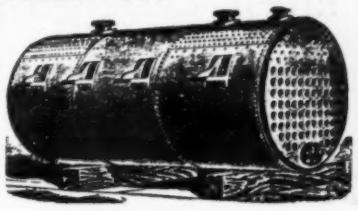

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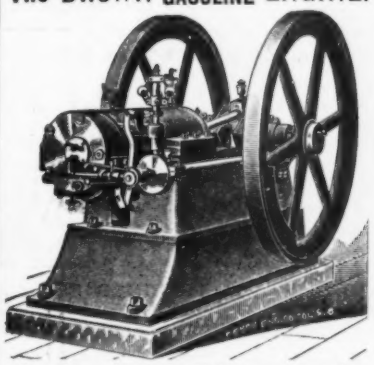
The BROWN GAS and GASOLINE ENGINE.



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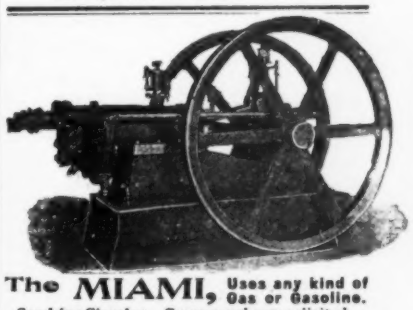

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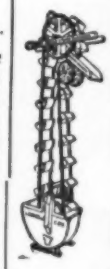

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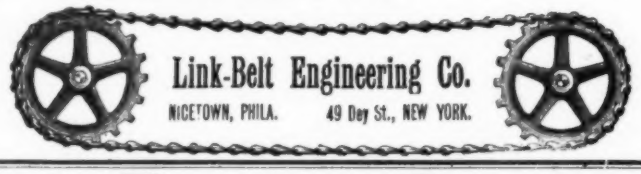

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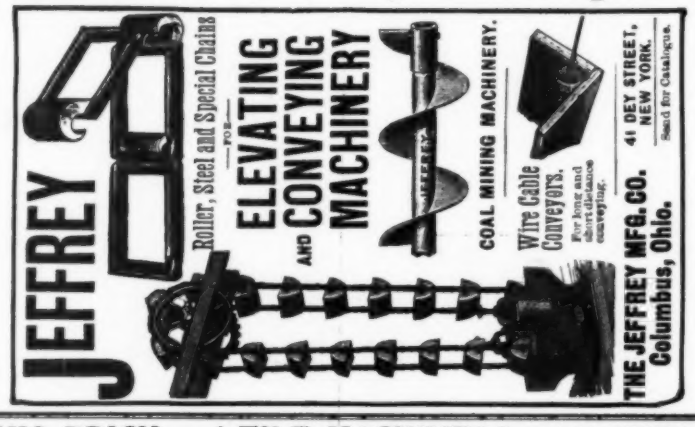

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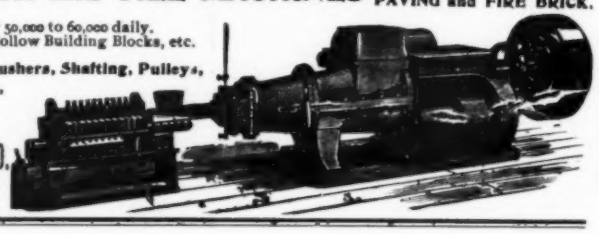

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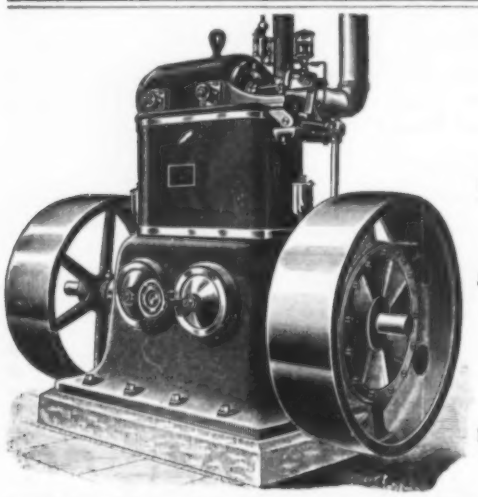

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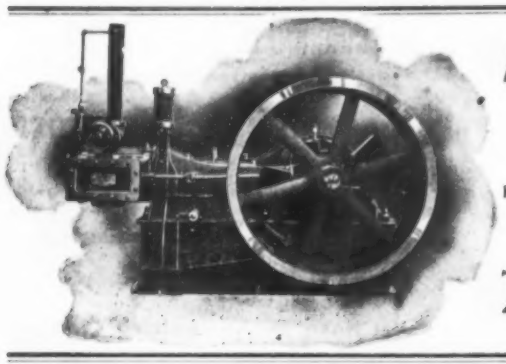

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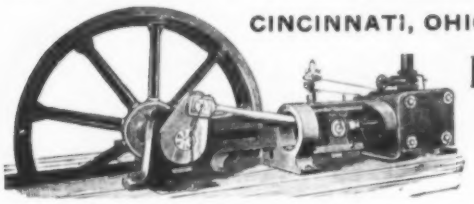

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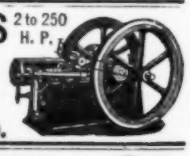

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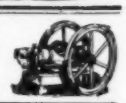

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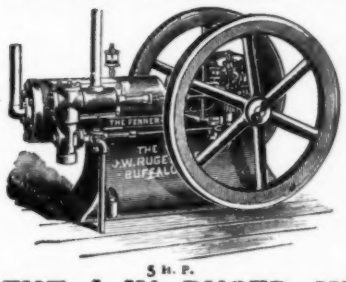

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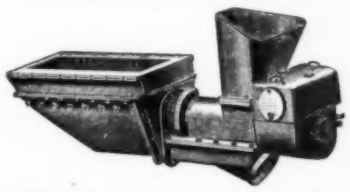

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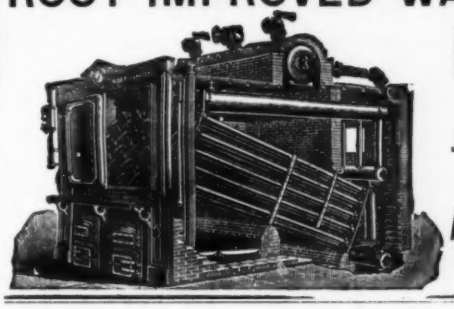

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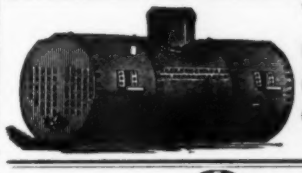

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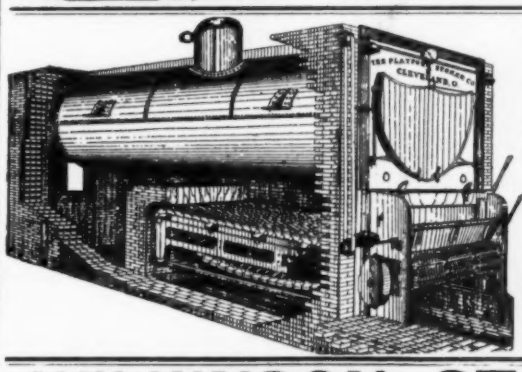

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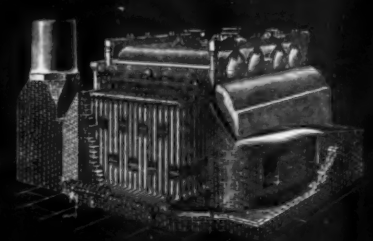

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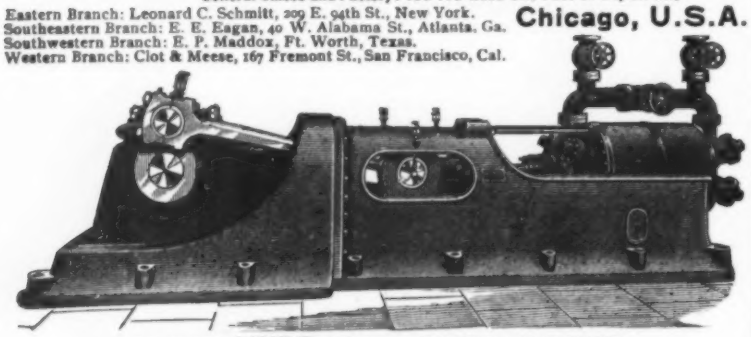

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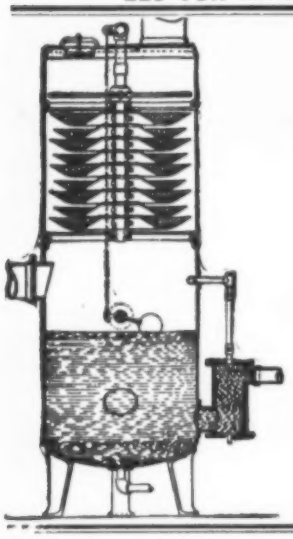

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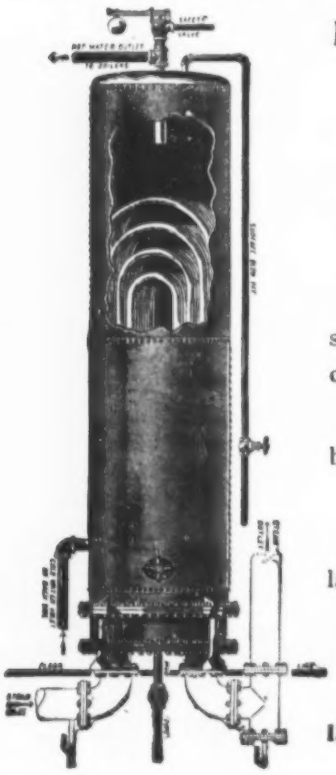

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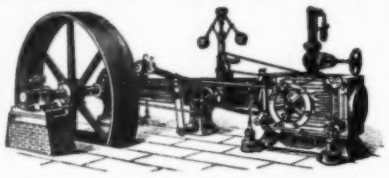

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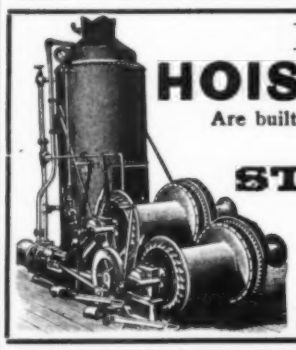

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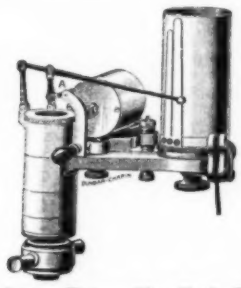

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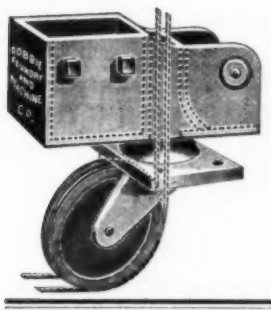

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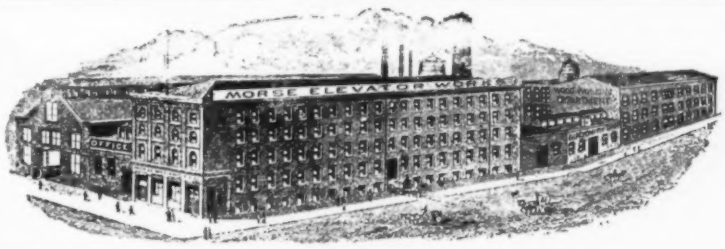

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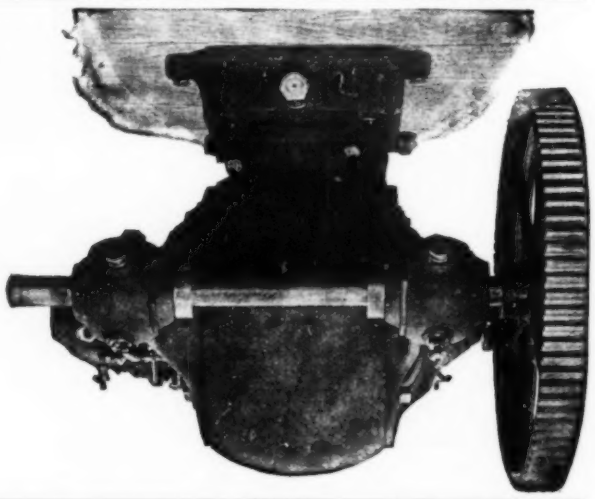

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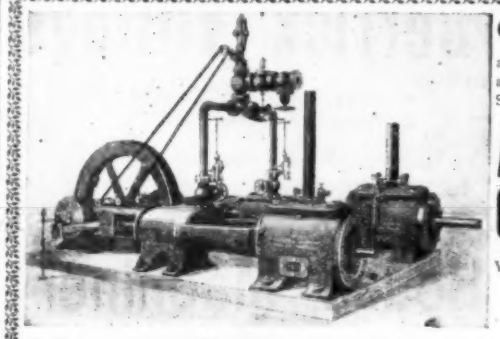

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VOL. XXXIII. No. 26. WEEKLY. | BALTIMORE, JULY 22, 1898. | $4.00 A YEAR. SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

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RICHARD H. EDMONDS, President.
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BALTIMORE, JULY 22, 1898.

Georgia's Good Credit.

It is announced that Governor Atkinson, of Georgia, has borrowed in New York for the State $200,000 at 2½ per cent. The arrangement was made with the National Park Bank upon the mere promise to pay without collateral. The president of the Park Bank is Mr. E. E. Poor, who has always shown himself liberally inclined toward the South, and the first vice-president is Mr. Stuyvesant Fish, who is not only interested as president of the Illinois Central Railroad in the development of a rich section of the South, but who is also one of the best friends of the whole South in the metropolis. The ease with which this loan has been secured speaks well for Georgia's credit abroad, and is another indication of the friendliness of Northern and Eastern capital to States of the South which show a disposition to keep up with the procession of modern progress.

A Patriotic Mississippian.

Major R. W. Millsaps, of Jackson, Miss., has by the loan of $25,000 to the Industrial Institute and College at Columbus, Miss., settled for a time the difficulties of the institution, and has given an exhibition of patriotism which will not be without its effect upon the State. The institution is the first of its kind ever founded by a State for the education of women. It was opened in 1885 at Columbus, that town having given property in land and buildings valued at $50,000, and in addition $50,000 in money. In the first eleven years 2000 young women have been under its tuition, and of 1276 who have gone from the school, 567 have become homemakers by marriage, 470 have become teachers in academies, 44 are stenographers, 30 teachers of industrial arts, 30 milliners, 28 merchants and saleswomen, 7 journalists, 17 in postoffice and clerical work, 7 printers, 5 insurance agents, 5 boarding-house keepers and 4 in hospital work. The work of the school is decidedly practical, and it would have been a blow to the young women of the State if the legislative tangle into which the appropriation of $45,000 for it had become involved had resulted in cessation of its work. Major Millsaps's loan was based entirely upon his devotion to the institution and his faith in his State, and not upon the interest which might accrue.

Southern Railroads Gain.

In an article on the gross earnings of railroads for June and the first half of this year the Financial Chronicle estimates that the betterment of earnings as compared with the first six months of 1897 must have reached more than $65,000,000. It calls particular attention to the fact that there are twenty roads or systems where the increase is in the neighborhood of $1,000,000 or more. In one case the addition exceeds $4,000,000. There is the Southern Pacific Company, which for five months ended May 31 increased its earnings by $4,361,162, which is nearly $500,000 more than the improvement of the Pennsylvania Railroad for the same period. It is interesting to note the improvements in the Southern roads. Among the notable increases for six months were the Illinois Central, $2,456,544; the Missouri Pacific, $1,827,630; Louisville & Nashville, $1,111,734; the Southern Railway, $905,698; the Memphis division of the Southern Railway, $101,210; Kansas City, Pittsburg & Gulf, $671,699; Texas & Pacific, $470,706; Norfolk & Western, $339,226; Chesapeake & Ohio, $329,797; Florida Central & Peninsular, $314,603; Mobile & Ohio, $198,062. The earnings of eleven roads in the central Southern group during June amounted to $6,722,392, which were greater than the same six months in any year since 1892. The earnings of six trunk lines during the month amounted to $8,420,538, less than those of the first six months of 1897, while the earnings of twenty-two middle and middle Western roads were $6,377,986. Taken as a whole, the Southern railroads seem to be holding their own, and in some instances to be doing better than the roads in more thickly-settled portions of the country, though there is hardly a class of roads which is not showing material improvement.

Georgia's Textile School.

Nearly every week develops a fact in connection with the proposed textile department in the Georgia School of Technology, increasing the brightness of the prospects of the new undertaking. Following the announcement that the trustees had secured $1600 in cash and $12,000 of machinery to be added to the $10,000 conditionally appropriated by the legislature for the textile school, came the donation of $2500 from Mr. Aaron French, of Pittsburg, Pa., and his promise of $3000 more on condition that a similar amount should be raised in Atlanta and Georgia. When contributions were first sought for the department, Mr. French, who is a practical manufacturer and an ardent advocate of technical education, gave $100 towards the undertaking. To this he has now added his larger gift and his munificent offer. The act of Mr. French, a native of Ohio and a citizen of another State, should be an example for men of means of Georgia, the State which will reap the principal advantages from the establishment of the new department. The benefits of textile education have passed beyond the stage of advocacy. They are being practically demonstrated in the results of such schools as those at Lowell and Philadelphia, and will be further shown in the schools at Clemson and Atlanta. It should not require more than three days for the progressive men of Atlanta to complete the $3000 contribution necessary to make good the conditional gift of Mr. French.

No Southern "Manana."

To a suggestion by the editor of the Manufacturers' Record of an undertaking for the advancement of the South, a well-known gentleman of the South, largely interested as a capitalist and as a railroad man in the energies of his section, replied that there was no use taking any steps at present, but that it should be delayed until the war was over. The state of mind displayed in that answer is one of the most discouraging elements in Southern development. If the Manufacturers' Record and all other influences for Southern progress had acted upon the principle of a more convenient season the wonderful strides made of manufactures and commerce during the last fifteen years would still be matters of the future. Back in the seventies the South was told that it could not manufacture cotton in competition with other sections of the country, which was an old story; then the idea of the South as an iron and steel manufacturer was derided in some quarters, and the fact is that nearly every accomplishment of the past decade had its Jeremiahs at its inception. In the panic of 1893 the cry of the halters was again heard, to be reiterated in the early days of the campaign of 1896.

The Manufacturers' Record is no Cassandra. It is conducted upon the principle that no time is better than the present for directing attention to the natural wealth of the South and encouraging the movements whereby the capital may be applied to it for the upbuilding of the manufacturing, railroad and commercial interests of that section. It believes that when the outlook is most gloomy then is the time for hopeful utterances, based upon the known qualities of the South and upon the conviction that all things come to him who strives. Acting upon this principle at the outbreak of the war against Spain, the Manufacturers' Record urged upon its constituency the maintenance of undertakings then in progress and the reaching out into new lines. It endeavored to show that there was no vital reason in the war for hesitancy about investments, and that the best time for preparing to reap the benefits of a return of peace was during hostilities. In some quarters, particularly in the cotton-mill industry, there has been a remarkable disregard of the threats which timid minds discovered in the war, but elsewhere the apprehensions have had a decided effect upon the purses and the minds of men who are usually in the forefront of development. It is not too late to urge upon these the advantages of freeing themselves from unnecessary restraint. The plight in which Spain now finds itself is largely due to its policy of "manana." "Tomorrow will do" is a fit motto for a declining power, and it is the explanation of its decline. For the South, pulsing with energy and laden with riches yet to be developed, there should be no "manana." Now is its accepted time.

Southern Mill Attractions.

The Fall River Herald, after six or eight months' discussion of the cotton-mill situation, acknowledges that the shrinkage in population of Fall River is not to be attributed perhaps entirely to Southern competition, but it adds:

> Nevertheless, the cold fact remains that the inhabitants of this city have been seeking other occupations and the population has fallen off. They have not all left this center for their health. There is some reason for the course which they are pursuing. There is considerable territory beyond New England. It may not be rich in dollars and cents at this moment, but it may possess attractions which offset the dollars and cents which are to be earned in factories. If these same dollars and cents are not numerous enough to be satisfactory to those who are now toiling for them, the latter will go, and their places will be taken by others who are contented to sell their labor for less money. Southern rivalry and various causes may compel Northern corporations to adopt a Southern standard, but they will not compel the operatives of today to accept that standard without a protest, and their protest will be filed in the form of an endeavor to better themselves. Northern companies can hold their own, doubtless, but they will hold their own under changed conditions. A decrease in the population of this city means more than the figures show.

It is not unlikely that other factors are contributing to the decline in population of the Massachusetts city. The Wilmington (N. C.) Messenger tells of a visitor from Massachusetts who is traveling through the South looking for a location for a cotton-mill plant in preparation for the expansion of business and industry when the war is over. How many representatives of New England industrial capital are inspecting the South would be hard to say, but the large dividends which have been declared by Southern mill corporations, ranging from 6 to 10 per cent., and the renewed activity in the mills there are indications of the attractions which the Southern field has for the cotton-mill industry.

Removing an Incubus.

The decision of the government to remove the mines which were placed in the different harbors of the country at the outbreak of the war against Spain will do much toward removing what has been in some quarters a distinct incubus upon activities in this country. The laying of the mines was an expensive undertaking, hardly justified, it is thought by some, by the circumstances. The actual outlay for the demonstration was nothing, however,

in comparison with the loss that might have occurred had a Spanish fleet been able to shell New York for instance. Still the actual expense, too, was little compared with the loss which has arisen as a sentimental effect of the mining of the harbors. Many conservative people became apprehensive because of the novelty of this country being engaged in war of any kind. The fears of such were augmented by the mine episode and the strict patrol of the harbors at night. The removal of the mines should destroy such fears and permit capital to continue its creative work.

Industrial News from Birmingham.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., July 19.

There is undoubtedly a better feeling in the iron market, so far as prices are concerned, than prevailed the preceding week. But the volume of business was less. Its restriction was due to the firmness of sellers, who insisted on better values than had prevailed. And the business that was done was registered at prices slightly over the low prices lately current. In some cases the reports are of sales equal to current production, while in other cases reports are of a very quiet market. Some sales of 8000, 6000 and 5000 tons were declined, although they were accompanied with report that at prices offered others would accept. As previously stated, furnace order books are now so comfortably filled that anxiety on that score has disappeared. The warrant iron is also more firmly held, and there is no keenness whatever to part with it by holders. This restricts business in it, and the market is reported as very quiet. For furnace iron $6.15 is repeated as inside price for gray forge. Strong efforts have been made to buy for less, accompanied by statements that others would accept offers, but so far as could be learned there were no concessions from $6.15. No. 2 foundry, held at $7 as inside, was assaulted in same manner, without securing any lodgment. No. 1 soft was marked up to $7.50, to which price No. 1 foundry was also advanced. There is no doubt of these slight advances and of a firmer feeling on the part of the furnaces, but they do not expect any activity for some time.

The export trade continues fair, and ocean room continues to be offered in moderate amounts, and is well taken when prices permit. But exact information as to amounts and prices are persistently withheld. The buyer of the soil-pipe works, which have been in receivers' hands for two years past, was Mr. Ahrens, of the Ahrens-Ott Company, at Louisville, Ky. He willingly admitted that it was imperative upon them for best results to get as near as possible to the point of production for raw material. The site for a planing mill at Ensley was selected on Saturday.

The Avondale Cotton Mill has finally received all its machinery and material, and a test will be made this week of its readiness for business. Applications are constant for employment by labor, and there will be no difficulty on the score of ample help.

The contract for preparing the site of the steel mill at Ensley for the foundation work has been let to an Alabama firm, who will commence operations today. It necessitates the removal of about 40,000 yards of earth and rock. The parties interested declare that there will be no let up in building operations until the structure is completed.

The Gate City Rolling Mill commenced operations the past week in some of its departments, and will be followed this week by the Birmingham Rolling Mills. The shut down has been one of the shortest in its history, and emphasizes the demand for its product.

The minor industries have all the work they can in this weather handle. They are delivering a good deal of completed work and taking in constantly new work to replace it. J. M. K.

New York and Philadelphia Iron Markets.

Iron and steel quotations remain stationary. Distribution is progressing as usual. Nearly all mills have resumed work. Pig-iron production, though restricted to the extent of about 80,000 tons per month, is abundant. Opinions are at variance as to probable conditions later in the season, especially in view of decreased production of pig and increasing melting. A good many consumers have placed contracts that will run them into late autumn. Those who have not done so are buying in a hand-to-mouth way.

Quotations at New York are as follows: Northern—No. 1 X foundry, $11; No. 2, $10.50; plain, $9.75; forge, $9.50 to $10. Southern brands—No. 1 X foundry, $10.75; No. 2 X, $10.25; forge, $10; basic, $10.

Philadelphia quotations today are: No. 1 X foundry, $11.50; No. 2 X, $10.50; No. 2 plain, $10; standard mill irons, $10.25; ordinary mill, $9.75 to $10; basic, $10; Bessemer, $12, and low phosphorus, $15.50.

Billets are being worked up fast, but are selling slowly at present. Mills are well sold up on spring and early summer orders, and buyers will not renew or extend contracts until they can size up more clearly the probabilities of the next five months. Today's quotations at Philadelphia are $16.75; Pittsburg, $14.75 to $15; Wheeling, $14.50 to $14.75.

The merchant bar mills in the East are making less money and doing less work than for months, owing to, in part, the success with which Western manufacturers invade Eastern markets. Iron which passes for refined has sold as low as one cent per pound in this market, though the retail sales being considerably more. Special steel bars have been called for briskly this week, but in blacksmith lots. Carriage and wagon makers are good buyers. Hardware manufacturers are also stocking up with a good deal of material they use, covering bar, sheet and merchant steel.

Projects are now shaping which will absorb large quantities of pipe, and it is now regarded as a most favorable time to buy. Manufacturers have given their figures, and business will probably result, but it looks as if further Western mills will have the best of the orders.

The nail trade continues quiet, though encouraging reports are received from all quarters, particularly for wire nails. Cut nails drag, and at present prices there is no room to offer additional inducements.

The plate and structural mills are, of course, busy. New York requirements are for 7000 tons. Bids were made on 4000 tons this week. Philadelphia specifications round up about 1500 tons, mostly small lots. Representatives of mills report in a general way a great deal of inquiry, and think that the first sign of a hardening tendency in the market will precipitate business. Angles are 1.20; beams and channels, 1.30 upward; ordinary tank plates, 1.20; flange, 1.35; firebox, 1.60 to 1.70.

Car-building material is now under inquiry, and all the locomotive builders are frequent and liberal purchasers.

The export inquiries are inducing two or three of the Philadelphia brokers to give special attention to foreign trade. The inquiries from abroad offer great possibilities, and foreign branch offices of American houses will soon be established.

The steel-rail trade is better than its spokesmen say, but the majority of the orders are for repairing requirements. There are opportunities of selling rails abroad, but negotiations drag.

Old rail dealers expect to handle large quantities of old rails during the next few months, as a great deal of stock is to be taken up. Today's Philadelphia quotations are $12 for old iron, and about the same at Chicago, where the main supply is likely to come from.

HOME CAPITAL IN MILLS.

Changes Wrought at Concord, N. C., by the Textile Industry.

[Special Cor. Manufacturers' Record.]

Concord, N. C., July 18.

An evidence of what home people in the South can do in the way of building and operating cotton mills, and of what the cotton-milling industry can do for a town, is illustrated no better in the whole South than it is here in Concord. This town can almost lay claim to be the pioneer in the cotton-milling industry in North Carolina, the old Concord Cotton Mills having begun operations in January, 1840, with John E. McDonald, a Philadelphian, as superintendent. It was run by Mr. McDonald and his sons until 1877, when it passed into the hands of Mr. John M. Odell, who was at that time a modest merchant in Concord. The old factory building is a tall, somewhat narrow structure, four stories high, and in architectural appearance greatly resembling a grain elevator. Honest brick and mortar were used in its construction, and it therefore stands today as the keystone to one of the most extensive cotton-milling plants in the South, large, modern mills having been built to either side of it. When Mr. Odell purchased the old mill in 1877 he put in new machinery and operated 2000 spindles. His business soon outgrew the productive capacity of the old mill, and in 1882 Mill No. 2 was built. The impetus to the cotton-milling industry of the town may be said to have dated from the opening of this mill. In 1886 Mr. Odell built Mill No. 3, and this was followed by Mill No. 4 in 1890, and the Buffalo Mills in 1894. The bleachery, with a capacity of 40,000 yards per day, in addition to the finishing of other goods, was put in operation in 1890. This vast milling plant of Mr. Odell's in Concord runs 30,000 spindles and 1350 looms, employs 1000 hands and consumes 10,000 bales of cotton every year. In addition to this, Mr. Odell has large interests in the Durham Cotton Mills, the Bessemer City Mills and the J. M. Odell Manufacturing Co., at Bynum, in Chatham county. In the management of his cotton-milling business he has the energetic and clear-sighted assistance of his son, Mr. William R. Odell. The Odells, it may be said, were the leaders in the progressive cotton-milling industry of Concord.

Other enterprising men of Concord also embarked in cotton milling, and prominent among them are Messrs. David F. and James W. Cannon, of the Cabarrus Cotton Mills, and the Cannons Manufacturing Co., who also have large milling interests at China Grove and Albemarle, N. C. These two mills, both new, operate 22,000 spindles and 800 looms. The building of these new mills converted suburban woods and farms into factory villages, through which runs a branch line of the Southern Railroad Co., and it is this that has changed Concord from an ordinary country town to the picture of a latter-day manufacturing community, and it is this that demonstrates what the cotton mills do for a town. The houses for the operatives are frame structures, designed for both health and comfort, and are in every instance neatly painted. They are laid off in regular blocks, each fronting on a street, and with a liberal back yard and garden plat to each house. In all these operatives' villages the spires of one or more churches are to be seen. School and library facilities are also provided. The families dress neatly, live comfortably and are satisfied with life.

Aside from making a change in the topography of the town from woods and fields to mills and villages, the development of the cotton-milling industry in Concord has brought the population, in the course of a few years, from 3000 to 7000, with a corresponding increase in the mercantile and other interests of the town.

Although the mills already enumerated operate a total of 52,000 spindles and 2150 looms, it does not mark the end to the cotton-milling industry of Concord. Lippard & Shealy are now building a new mill, to operate about 2500 spindles, and the G. W. Patterson Manufacturing Co. should be included in the town mills proper. It is located four miles from Concord and has a combination of steam and water-power. It operates 3000 spindles—2000 in spinning and 1000 in twisting.

It is at Concord that the new cotton mill which it is proposed to operate exclusively by colored labor is located. Warren Coleman, a colored man of considerable wealth, conceived the project and has engineered it so far on its course. The building has been finished and is ready for the machinery. Coleman's project has received a good deal of attention from the press, both North and South. He has not only had the moral support of many white people, but in some cases their substantial aid. WADE H. HARRIS.

IN HORSE CREEK VALLEY.

A Wonderful Utilization of Its Water-Power Industrially.

[Special Cor. Manufacturers' Record.]

Augusta, Ga., July 16.

After leaving Batesburg, the train on the Southern Railway bowls along through a stretch of forty or fifty miles of the finest agricultural country teeming with thrifty villages and smiling farms, truck gardens and orchards. The passengers take a hasty glance at the famous "Ridge" section of South Carolina. Peaches, grapes and melons here reach their greatest perfection in the utmost profusion, while farm crops attain the largest yield to the horse with the most uniform regularity.

The country is gently undulating, sufficiently so to afford natural drainage, and the soil is a light, sandy loam, with a clay subsoil. A horse will cultivate twice the acreage in this soil as in the stiff clay land. This region very rarely suffers from drought, and, owing to the porosity of the soil, as well as its being elevated table land, a failure in crops from the effects of excessive wet weather is unknown. The lands are stimulated up to the highest state of productiveness, and the cotton, fruit and truck products find a ready market in the adjacent manufacturing district of Horse Creek, as well as at the flourishing city of Augusta.

On leaving the ridge and entering the valley of Horse Creek, near Graniteville, the entire aspect of things changes, and the remaining ten miles of the journey before reaching Augusta is taken up by a succession of huge cotton mills, immense storage ponds and thriving manufacturing villages, with their long rows of freshly painted operatives' houses. No

more impressive or inspiring sight can be found than is here presented of Southern enterprise and industrial activity. Every particle of power afforded by that remarkable little stream, Horse Creek, has been utilized, save one site which is owned by local capitalists, and will be used for a bleachery.

While cotton manufacturing has been more or less depressed throughout the world, these mills have gone on continually enlarging, and, in the meantime, paid their regular dividends without intermission. The Graniteville Mills' last annual statement was a most gratifying showing of good management and prosperity. The Langley and Aiken mills, under one management, have enlarged to the full capacity of their water-power. With their great batteries of modern looms, with the Northrop attachment, they are destined to silence mills of less favorable location that employ effete methods and out-of-date machinery.

There are five cotton mills in the Horse Creek district, with the following capacity:

	Spindles.	Looms.	Consumption. Bales.
Graniteville	25,000	700	10,000
Vaucluse	11,000	300	5,000
Warren (unfinished)	30,000	800	12,000
Langley	43,000	1,300	20,000
Aiken	27,000	727	35,000
Total	136,000	3,827	82,000

If new mills are built on Horse Creek, or further enlargements take place, the additional power required will have to be derived either from steam or from the development of the neighboring shoals of the Savannah by electrical transmission. With our widening destiny and the acquisition of a vast expanse of new territory; with the expansion of commerce that must result at the conclusion of the war with Spain, and the brisk demand for American products and manufactures, it is probable that the prosperity of these mills will be greatly augmented and that their increase would be both judicious and desirable. The future electrical development of the Savannah by the manufacturing interests of Horse Creek is not unlikely.

In the valley of Horse Creek are found a number of varieties of clay which are largely used for manufacturing and commercial purposes, and the operations carried on in their mining and preparation have attained considerable proportions. Several large concerns are engaged in the manufacture of terra-cotta, sewer pipe, jugs, flower-pots, fire brick, etc. Recently there has been found a superior quality of clay suitable for making vitrified fire brick, and some parties are now making preparations to engage in their manufacture. There are also extensive beds of cement gravel found here which is coming largely into use as paving material for streets and turnpikes. It has come into high appreciation in the cities of Charleston and Savannah, which have given out contracts for large quantities.

But the most important mineral product of this locality is kaolin. Kaolin, or china clay, is used in the manufacture of queensware, wall and newspaper, as an absorbent of grease in batting mills and for the adulteration of various commercial products. Crude kaolin brings from $7 to $10 per ton. The following companies are engaged in kaolin mining: The T. G. Lamar Kaolin Co., the Richard McNamee Co., the Nonpareil Co., the Paragon Clay Works, the Immaculate Clay Co. and the B. D. Lamar Co. The combined output is more than 50,000 casks. The kaolin taken out here is of so fine a quality and so free from grit that it does not need washing as a general thing, and is especially adapted to making queensware. During the civil war a considerable plant was operated near Langley, S. C., for the manufacture of plates and dishes for the use of the Confederate armies. The goods manufactured then were said to have been of excellent quality.

HENRY P. MOORE.

McMillan Shoals Power.

Reports concerning the development of the McMillan shoals, which are located near the city of Spartanburg, S. C., have been current recently. Messrs. William C. Whitner & Co., of Anderson, S. C., confirm these reports, and they write the Manufacturers' Record that they intend to commence the necessary construction work in the near future.

Messrs. Whitner & Co. have recently made a contract with the city of Spartanburg to furnish street lighting for a term of ten years, and it is their purpose to begin the erection of an electric-light plant to furnish this service, and for supplying lighting and power for other purposes. The firm proposes to develop the water-power at McMillan shoals, where, it is estimated, from 800 to 1000 horse-power can be readily obtained, and to transmit the power to Spartanburg, a distance of ten miles.

Messrs. Whitner & Co. have had much experience in work of this character, being the builders, they claim, of the first plants in the South for the long-distance transmission of electric power.

Opportunities in Guatemala.

An official of high standing in Guatemala says that the government "is willing, anxious and almost compelled to sell the Northern Railroad; this, I think, would be a good chance for an American syndicate to get hold of a good business. Today that road could be gotten under the most favorable conditions, and with the most liberal concession. The same can be said of the Verapaz road. Then again, one or many American companies could buy today such plantations as they would wish, and for prices which could be considered purely nominal. Then again, an American company could come and establish a bank, which would be most welcome and could do today profitable business with the choicest securities."

It is stated that during the year ending July 1, bananas valued at $494,500 were brought into Baltimore from the West Indies and Bahama Islands for distribution. The imports also included cocoanuts to the value of $36,500, and $200,000 worth of other fruits. These included dates, figs, lemons, oranges and pineapples. Several Baltimore firms have direct lines of vessels in the pineapple, banana and cocoanut trade; most of the European fruits, however, come through New York.

In the New York Sun a novel point is made that the missiles which were hurled from the warships against Santiago may have plunged into the very ore mines whence their original metal came. A large lot of pig metal from this Cuban ore was on hand in the United States when the war broke out, and was subsequently used for rush orders for steel projectiles and for ordinary shells.

The Southern Railway Co. has made another shipment of 6000 tons of Alabama coal, which has been sent to points on the lower Mississippi. The coal was loaded on barges at Greenville, Miss., direct from the cars.

About the only paper in the country which has had a fling at the battleship Texas since its recent service at Santiago is the Boston Journal.

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

TRADE WITH FREE CUBA.

A Southern City the First to Begin It—Iron-Ore Shipments.

A Southern city, New Orleans, has the honor of being the first to send a cargo of goods to the West Indies since the United States forces have taken possession of any portion of it. The Norwegian steamship Espana has been loaded with 500 tons of canned goods, groceries and other provisions, and has sailed for a port near Santiago, from which the cargo can be distributed in that city and Eastern Cuba. The firm which loaded the vessel intends to send others as fast as possible, and to have a line of vessels plying directly between New Orleans and Santiago as soon as the government will permit the opening of trade. It is believed that there is an excellent opportunity to sell American canned goods throughout Eastern Cuba, and the New Orleans people intend taking advantage of it.

The question of trade between Southern seaports and the West Indies is already receiving considerable attention. It is stated that work may be resumed at the iron mines in Eastern Cuba, near the city of Santiago. These mines, among the richest on the Western Continent, are owned principally by American companies, and from them are supplied in a large measure the works at Sparrow's Point, while steel plants at Pittsburg, Pa., are also consumers. With the resumption of work it is expected to begin operating a steamship line between Baltimore and the mines for the transportation of this ore.

Newport News' Prospects.

It is stated that the Newport News Shipbuilding & Dry Dock Co. is negotiating with the view of securing at least two of the battleships to be constructed by the government, as well as the two vessels which, it is understood, will be built by the Pacific Mail Steamship Co. As stated in the last issue of the Manufacturers' Record, it will build three vessels for the Morgan Line. With this work the capacity of the plant will be tested to its utmost.

In connection with this report is the statement that another syndicate has approached Mr. C. P. Huntington with the view of purchasing the property. A party of capitalists recently made an inspection of the plant with Mr. Huntington. Some time ago the Manufacturers' Record announced that Sir William Armstrong & Co., of England, might become interested at this point. Whether the parties referred to included the Armstrong people or not is as yet unknown.

Newport News' Dry-Dock.

Work has begun upon the dry-dock at Newport News, Va., which, as stated in the Manufacturers' Record some time ago, was to be completed by the Newport News Shipbuilding & Dry Dock Co. It has been decided to make the length of the dock 800 feet, with a breadth of eighty feet at the bottom, and 148 feet at the top. The depth will be forty-one feet eight inches from the top of the sill, giving thirty-four and one-fourth feet of water at low tide. The keel blocks will extend five feet above the bottom, enabling a vessel drawing twenty-nine and one-fourth feet of water to enter the deck. The entrance to the deck will be 106 feet at the top and eighty-five feet wide at the bottom, with granite and concrete cassements. The gate will be a caisson, like that of the old dock, provided with engines and pump to empty and float it out of the way. The bottom of the gate will be of stone and concrete on a row of piles bracing the entrance at each side.

There will be a line of piles, six in width down the center of the dock, on which the keel blocks will rest, while on each side of this will be a row of four piles for the docking keel blocks to rest upon. Piles will extend from each side of the dock for a distance of forty-five feet, which will be connected with the sides of the dock with cross braces for the purpose of thoroughly strengthening it. The sides of the dock will be of concrete walls, with granite facings, while the bottom will be concrete, with granite facing, laid upon rows of piles with connecting cross stringers of timbers in both directions. It is to be built within eighteen months, and will cost, in round numbers, $1,000,000.

May Build Terminals.

A dispatch from New Orleans states that H. C. Moore, president; Charles Resling, engineer, and other officers of the Nassau Construction Co., of New York, have been at Port Chalmette with the view of obtaining data in order to bid upon the proposed wharves and other terminals to be constructed at that point by the New Orleans & Western Railroad Co. Mr. Moore is quoted as saying that Northern contractors are much interested in this business, as it is believed there is more work of this kind to be done in the Southern States than in any other section of the country.

Rails for Siberia.

Another large cargo of steel rails and fittings for the Trans-Siberian Railroad has cleared from Sparrow's Point, Md. The British steamer Venus, loaded with 11,230 steel rails, 6799 bundles of plates and 4606 boxes of bolts and spikes has sailed for Vladivostok, making the sixth cargo sent to that port by the Maryland Steel Co. The value of the cargo of the Venus is placed at $69,551. The British steamer Strathnevis will also load for Vladivostok.

Jottings at the Ports.

The Merchants & Miners' Transportation Co. has changed its schedule so that steamships leave Baltimore for Boston Tuesday and Thursday and Sunday, 4 P. M.; for Providence, Monday, Tuesday and Saturday, 4 P. M.; for Savannah, Tuesday and Friday at 3 P. M., and for Newport News and Norfolk, Monday, Thursday, Saturday and Sunday at 4 P. M.

A dispatch from Brunswick, Ga., states that what is known as the Dennis docks property may be utilized for commercial purposes, and that engineers have been making surveys of the tract in the interest of the Southern Railway. These docks were constructed several years ago, but they have never been utilized. They are located at a point where the water will admit the passage of deep-draught vessels.

The Georgia & Florida Navigation Co., interested in a steamboat service on the Chattahoochee river and tributaries, has contracted for two steamers, both of which are under construction. One of these boats, which is now being built at Apalachicola, Fla., is practically completed. She is 150 feet long, and draws but thirteen inches of water, consequently she can navigate these rivers when the water is very low. The other vessel is also being built in the same city, and will be completed about September 1.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Louisville & Nashville Earnings.

Mr. August Belmont, chairman of the board of directors of the Louisville & Nashville Railroad Co., has made public a statement which shows why the company has been able to make the very substantial increase in the salary of its employes, already noticed in the Manufacturers' Record. The statement shows gross earnings for the year ending June 30, 1898, to be about $22,000,000. The operating expenses were 67⅔ per cent., leaving net earnings of $7,100,000. In addition to this, the company has other income, which makes the total $7,694,000. Deducting fixed charges, also obligations of every kind, there remains a surplus of $1,621,000. There has been appropriated out of this surplus the following amounts: For couplers and air brakes $500,000, for rolling stock $500,000, for reduction of grade $248,441, making a total of $1,248,441. The amount for the purchase of couplers and air brakes is sufficient to fully equip, in accordance with the requirements of the interstate commerce commission, all of the cars in the service of the company. While the rolling stock has been fully kept up and added to, the increased business of the company has required an addition to the same, the cost of which it was not deemed advisable by the board to charge to capital account.

B & O. Reorganization.

A New York dispatch states that the success of the Baltimore & Ohio reorganization managers has exceeded expectations. So large a proportion of the various issues of bonds and stocks treated in the plan have assented to it that Speyer & Co., Kuhn, Loeb & Co. and Speyer Bros., the reorganization managers, give notice that the time for further deposits has been limited to August 1, after which date deposits will be accepted, if at all, only upon such terms and conditions as the managers may impose. J. P. Morgan & Co., Brown Bros. & Co. and Baring, Magoun & Co. announce that holders of Baltimore & Ohio 5 per cent. consolidated mortgage bonds, issued under the mortgage dated December 19, 1887, and known as bonds of 1898, representing more than 75 per cent. of the bonds deposited with these firms under the agreement of November 1, 1897, have given their written assent to the reorganization plan. These firms, therefore, by the terms of this agreement are empowered to deposit all of the bonds of 1988 held by them.

Surplus for Improvements

A New York dispatch states that President Stuyvesant Fish, of the Illinois Central Railroad Co., has recently written a letter to several banking firms which is causing considerable comment. In the letter he is quoted as saying that the earnings for the fiscal year just closed will very largely exceed the regular 5 per cent. dividend, but that he has decided to recommend that no increase in distribution be made. He proposes that the surplus shall be put into improvements which are properly chargeable to capital account.

In last week's issue of the Manufacturers' Record the excellent record which the Illinois Central made during the past year was commented at length. Judging from President Fish's statement, it is intended to follow a very conservative policy, and to place the system in the very best condition, not only financially, but physically.

Employes of Southern Roads.

It is reported that there is a possibility that the Southern Railway Co. may utilize the pay car for disbursing employes' salaries. Commenting on this an exchange says:

"The Plant system, which has about 5600 employes, has two pay cars in its service, and the men receive their wages or salaries in cash. The two paymasters are kept pretty busy in making their rounds and attending to other duties. To handle the 20,000 employes over such a great length of lines as are under the Southern's management would take at least six pay cars, and the expense would be little short of $1200 a month. The check system is decidedly the cheaper under such circumstances. The Central, which has in its service something less than 4000 men, pays off by check."

A Possible Combination.

A dispatch from Memphis, Tenn., states that it is understood that the Choctaw, Oklahoma & Gulf Railroad Co. has decided, if possible, to secure control of the Little Rock & Memphis Railroad, extending between the cities named. If this is done, the Choctaw system will be extended from its present terminus to Little Rock, Ark., a distance of 130 miles. Over a year ago the Manufacturers Record stated that these railroads would probably form a portion of a direct east and west system, terminating at Memphis, Tenn., on the east, and extending into the Indian Territory on the west. It is stated that if the Little Rock & Memphis is secured it will be reorganized under the title of the Choctaw & Memphis Railroad, with a capital stock of $1,750,000.

Atlantic Coast Line Co.

For several months the Atlantic Coast Line has been arranging a stronger combination of its various lines, and has secured the necessary legislation in Virginia, North and South Carolina to carry out its purpose. The several lines in the States named are organized into the Atlantic Coast Line Co. of Virginia, North or South Carolina, according to the locality, with one set of general officers. The last arrangements have been completed in South Carolina, and the following officers elected: General manager, J. R. Kenly; general auditor, W. A. Riach; general superintendent, J. F. Divine; traffic manager, T. M. Emerson; secretary and treasurer, C. C. Olney; assistant treasurer, Jas. F. Post, Jr.

Another Virginia Line.

The promoters of the railroad in Rappahannock and Culpeper counties, Virginia, have reorganized a company to promote this enterprise. P. H. O'Bannon is president; N. P. Bond, vice-president; S. R. Smith, treasurer; E. P. Hill, secretary; finance committee, W. A. Smoot, N. P. Bond, H. P. Scott; executive committee, J. B. Miller, F. P. Smith, S. R. Smith. It is intended to run a line from Culpeper Courthouse through both of the counties named. Of the financiers, Messrs. N. P. Bond and E. P. Hill are of Baltimore, Mr. Bond being a member of the firm of Steele, Semmes, Carey & Bond. Mr. Smith is of Culpeper Courthouse, while Mr. Smoot is of Alexandria, Va.

B & O Improvements

It is expected that if the reorganization of the Baltimore & Ohio, recently announced, goes into effect, the management will be able to make a number of additional improvements which will be of great value in economically operating its system. It is calculated that the grading of the Chicago line will be reduced to such an extent that the saving in motive power will be fully $100,000 annually on this division alone. It is intended to cut down the grades on other divisions proportionately, while many improvements will be made in several divisions in the extension of yards and the enlargement of shops.

Railroad Notes.

The Carolina & Northwestern Railroad Co., at its annual meeting at Hickory, N. C., re-elected G. W. F. Harper, president.

At the annual meeting of the North Carolina Railroad Co., held at Greensboro, N. C., R. M. Norment was chosen president; H. C. Worth, secretary, and W. J. Sutton, treasurer.

It is announced that the Richmond, Nicholasville, Irvine & Beattyville Railroad in Kentucky is to be sold again by order of the court at a date to be fixed in September. This road was purchased by a Philadelphia syndicate, but all the purchase money was not paid.

The Wellington & Powellsville Railroad Co. is now constructing depots along its line, and is preparing to begin operating its road, now under construction, in September next. It will form a feeder to the Atlantic Coast Line, and will extend between Windsor and Ahoskie, N. C.

The Mobile & Ohio Company has made arrangements to run passenger trains on the Montgomery division into the union station recently built at Montgomery, Ala. This will give the Mobile & Ohio a great advantage in local passenger traffic. The station in question is one of the finest in the country.

The Louisville & Nashville Railroad Co., it is stated, is handling such a freight business that every locomotive which can be placed in service is being utilized. In spite of this fact, some delay is caused in moving trains, and there is a possibility that the company may be obliged to purchased additional engines.

The Metropolitan Railroad Co., of Washington, at its recent annual meeting received reports showing that the business done for the past year was greater than during any other year in the history of the company. The receipts were nearly $900,000, and 8,000,000 passengers were carried during the twelve months.

The Central of Georgia Railway Co. has recently built at its own shops 200 freight cars, which are among the best ever turned out in this country. They are constructed to carry 70,000 pounds, have a modern system of ventilation, and contain all the latest improvements in freight car construction. They indicate that this company has facilities for turning out a high grade of rolling stock.

The report of the Alabama Car Service Association for the month of June shows that 22,137 cars were handled in the association's territory in that month, as against 19,638 during the same period last year, an increase for this year of 2499 cars. The number of cars handled in first six months of '98 was 141,687, against 121,373 for the same period last year, an increase for this year of 20,314 cars.

The Mobile & Ohio Railroad Co. has secured quite a large business in the transportation of grapes. The territory in the vicinity of Mobile is especially adapted to grape culture, and already a number of vineyards have been planted at this point. It is stated that a ready market is found for the fruit in St. Louis and other Northwestern cities. The railroad company has been shipping grapes North for nearly a month.

Mr. V. Trolio, of Canton, Miss., is preparing to plant on forty acres of land near that town, pecan and black walnut trees.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

Adding 4000 New Spindles

The Sterling Cotton Mills, of Franklinton, N. C., which announced some time ago its intention to make decided improvements to its mill, has completed the erection of an additional building to its plant. It has been definitely determined that 4000 more new spindles will be added to the 6240 now in operation, and they are now being installed. The company's product will be ply yarns, and it is making every endeavor to be equipped with every modern device for making a perfect yarn. Mr. S. C. Vann is treasurer of the company.

To Add 6000 Spindles, 300 Looms.

The Pee Dee Manufacturing Co., of Rockingham, N. C., has definitely decided concerning its proposed new mill No. 2, recently announced as in contemplation. The mill will be built, and work on it is to commence immediately. The structure will be two stories high, 317x100 feet, and its equipment of machinery will include 6000 spindles, 300 looms, dyehouse equipment and the necessary engine and boilers to furnish the power. This machinery has not been purchased yet.

To Add 5000 Spindles.

The McColl Manufacturing Co., of McColl, S. C., has about completed its new building, which is two stories high, 80x160 feet. Some time ago this company decided to add 5000 spindles to its plant, and the new building which is referred to herein is intended to accommodate that machinery. The machinery is arriving daily and being put in position in order to commence operations in the near future. The mill will make hosiery yarns out of Egyptian cotton.

Textile Notes.

Messrs. A. J. Baldwin & Co., Dawson, Ga., have abandoned their proposed rope factory, for want of capital.

The Newnan Cotton Mills, of Newnan, Ga., has decided to install in its factory a humidifying apparatus, and contract for same has been placed.

The Elmira Cotton Mills, of Burlington, N. C., has placed an order for an equipment of a plant for supplying its factory with electric lights.

The vice-presidents of the Southern Cotton-Growers' Protective Association will meet at Memphis on August 16 to elect a successor to the late president, Hector D. Lane.

The failure to establish a textile school at Augusta, Ga., has led to an agitation of a plan for the establishment of a textile course in each of the mills of the city, where young men desiring to learn the cotton-milling business could work from the bottom through all the branches of the industry.

Mr. B. H. Wade, of Atlanta, Ga., one of the incorporators of the new Wahneta Mills, has purchased a site for the establishment of his proposed knitting plant. Three acres of land were purchased. During August Mr. Wade will superintend the installation of the new electric

plant for the Cedartown Cotton Manufacturing Co.

The Cleveland Cotton Mills, of Lawndale, N. C., is now installing the new 250-horse-power engine, for which contract was placed recently. An improved system of fire protection has also been placed in position. A number of tenement-houses are in course of construction for the operatives.

The first bale of cotton marketed this year in Texas was sold at San Antonio for nearly $225. It was raised by Mr. C. M. Lindholm, who stated that it was picked from stalks planted in 1897. Mr. Lindholm says that perennial cotton is the only salvation for the farmer who is compelled to sell it at four cents.

Charter has been granted to the Eureka Mills, the company reported lately as to continue the operation of the Chester (S. C.) plant formerly known as the Catawba Mills. It is a 5000-spindle yarn mill. Leroy Springs is president of the new concern, with Chas. J. Webb, of Philadelphia, vice-president, and Waddy C. Thompson, secretary.

The first annual meeting of the stockholders of the Grendel Mills, of Greenwood, S. C., was held last week. The reports of the officers showed the business of the first year to have been quite satisfactory. Further than this nothing definite was given to the public. The plant was only established about a year ago. It is equipped with 10,304 spindles and 336 looms, its product being sheetings.

The annual meeting of the stockholders of the Lancaster Cotton Mills, of Lancaster, S. C., was held last week. Reports of officers were submitted, showing a most gratifying and satisfactory condition of the plant and its business. A dividend of 3 per cent. was declared. The old board of directors was re-elected, and Leroy Springs, president; W. Ganson, vice-president, and Waddy C. Thompson, secretary-treasurer.

The annual meeting of the stockholders of the Columbia Cotton Mills, of Columbia, Ala., was held last week. Mr. John T. Davis, president, presented the reports of the managing officers. The results shown were satisfactory. New machinery was put in during the year by which the quantity and quality of the product was much improved. The plant has 2100 spindles and $50,000 capital. Mr. Davis and the other present officers were re-elected.

To Develop Coal Deposits.

An important transaction has been completed that insures the development of an extensive tract of coal lands in North Carolina. The purchase of 1575 acres in Chatham county has been made by Mr. Samuel P. Langdon, of Philadelphia, Pa. Mr. Langdon writes that he bought for the North Carolina Coal & Coke Co., and that the property contains approximately 9,000,000 tons of superior gas and steam coal, and that he has opened a slope and installed machinery having a hoisting capacity of 1500 tons per day, and is preparing to put the machinery in position and to build 100 miners' houses, together with all necessary other improvements for the production of the tonnage referred to. The plant decided upon will be a modern one in every particular, a duplicate of several that the members of the company have in the State of Pennsylvania, except that in the North Carolina case a plant will be constructed for the manufacture of coke in addition to the shipping of coal to market. The property is located in Chatham county, one and one-quarter miles from Gulf Station, on the Cape Fear & Yadkin Valley Railroad.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., July 19.

The extremely dull conditions which have prevailed in the cotton-oil market during the past week or two are yet apparent. The demand is of the slowest kind, but prices are strong. Improved enquiries from Europe, together with the prospect of an increased West India trade, have imparted stability to the market. The fall of Santiago, the latter now being an open port, has already caused a spurt in cotton-oil circles. It is well known that provisions of all kinds are extremely scarce in Santiago and contiguous territory, and as compound lard is a leading article of consumption there, the prospect of active trading is promising. This statement applies equally to the entire island, Porto Rico included, and it is only a question of time when the conditions which now prevail in Eastern Cuba will be general. In a jobbing way there is very little doing, and as the soap trade purchased extensively earlier in the season, and is yet receiving these contracts, not much is hoped for in that quarter, although the drop in tallow interfered with the consumption of oil in this connection. Lard has improved in tone, and prices are up. October lard, Chicago, is quoted at 5.75 cents. Tallow is stronger and quotably higher at 3⅜ cents for hogsheads. Compound lard is quoted at 4⅜ cents for Western and 4¼ cents spot goods. Prime yellow has been marked up, and as prime grades generally are becoming more scarce, it is difficult to see a course for the cotton-oil market other than an upward one, seeing that the situation is still further improved by the knowledge that the product will be needed—all that is available probably—before new-crop oil appears, notwithstanding that Marseilles consumers are yet supplied. Very little tank crude is available now, which is quoted at 14 to 14½ cents valley to Western packers. As to stocks, the New York Journal of Commerce says: "The claim is they are much less than a year ago, but there is no way of finding it out, unless, as a dealer said, some exporter would bid 27½ cents, when he would get the whole of it. There are estimated to be about 8000 barrels in New York outside that held by the American Company, which is believed to be considerably more than that amount. There are no large lots in Atlantic States, and only two lines in Texas, aggregating 12,000 barrels, while the South estimates 40,000 to 50,000 in the Mississippi valley. But the trade here believe these latter figures too small, but yet they regard the total stock in the United States as under 100,000 barrels, and a good deal less than a year ago." The following are closing prices: Crude, 19 cents; crude, loose f. o. b. mills, 16 cents nominal; summer yellow, prime, 23½ to 24 cents; summer, off grades, nominal; yellow, butter grades, 26 to 27 cents; white, 28 cents; winter yellow, 28 to 29 cents; salad oil, 29 to 30 cents. Liverpool, England, cotton oil is quoted at 15s. 9d., steady, but no demand. Exports aggregate 2300 barrels and arrivals from the South 3640 barrels.

Cake and Meal.—The usual enquiries which prevail at this season from abroad with regard to new-crop cake contracts are proceeding. Current prices of available stocks are considered too high by shippers, and very little business is doing in consequence. Advices from the U. K. are to the effect that the quiet demand for feeding stuffs, as is usual at this period of the year, is most marked, and with sellers showing a desire to realize, further reduced prices prevail. The few spot transactions that have occurred are quite retail in character at the subscribed quotations, and as regards afloat and shipment parcels of oilcakes there is an absence of enquiries. Prices are £5 10s. to £5 17s. 6d. for American cotton cakes.

Cottonseed-Oil Notes.

The machinery for the cottonseed-oil mill at Florence, Ala., has been purchased and the establishment of the enterprise is assured. The mill will be in operation in time to use this fall's crop of cottonseed.

The charter of incorporation of the Central Cotton Oil Co., of Jackson, Miss., was filed last week. This new industry is being established by Mr. Ed Cahn, of Meridian, and makes the third oil mill for Jackson. The buildings are nearing completion and will be ready for the fall business.

The market for cottonseed products in New Orleans is quiet, with values steady. There is very little demand either from domestic or foreign sources. Receivers' prices are as follows: Cottonseed, $7 per ton of 2000 pounds net to the mills, no commission of any kind to be added; cottonseed meal, jobbing per carload at depot, $17.75 per short ton of 2000 pounds; for export, per long ton of 2240 pounds, f. o. b., $19.25 to $19.50; oilcake for export, $19.25 to $19.50 per long ton f. o. b.; crude cottonseed oil, at wholesale or for shipment, strictly prime oil, crude, 15 to 15½ cents, loose f. o. b. tanks at Mississippi valley points; in barrels, 17 to 17½ cents; cottonseed hulls, delivered per 100 pounds, according to location of mill, 12 to 17½ cents; linters, according to style and staple—A, 3½ cents; B, 3⅛ cents; C, 2⅝ to 3 cents; ashes, none; refined cottonseed oil, prime in barrels per gallon, at wholesale or for shipment, 22 cents for export.

The Southern Field for July, published by Mr. M. V. Richards, land and industrial agent of the Southern Railway, Washington, D. C., is well illustrated with pictures of threshing scenes, cattle, the Yadkin water-power, a Memphis street scene and two typical cotton mills. There are many interesting and suggestive articles dealing with grape growing, peach industry, stock raising and other agricultural subjects, and with the resources of the States through which the Southern Railway extends.

The saw mills, commissary, lands and other property owned by W. H. Aldridge, at Rockland, Texas, were sold to William Cameron & Co., of Waco. It is stated that Mr. Cameron intends putting in a large planing mill, and will also build an additional saw mill, to be one of the finest in the State, with a capacity of 150,000 feet a day, which, with the cut of the present mill, will enable Rockland to turn out 225,000 feet of lumber daily.

Louisville having under a recent provision provided for the exemption of municipal taxation, for five years, of new manufacturing enterprises, the Louisville Courier-Journal calls attention to the fact that there is no need for that city to ask for outside capital, and that its own people should hasten to take advantage of the golden opportunity for profitable investment now offered them.

The Standard Basket Co., of Fort Payne, Ala., is not removing its plant to Birmingham, Ala., as had been recently reported generally by the press. Instead, the company will merely move its offices to Birmingham in order to be in closer touch with its trade.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., July 21.

In the phosphate market the tone is quiet, with little or no prompt demand, and manufacturers are not purchasing in large lots. Prices continue steady. The development at points of production shows considerable activity in many respects, and miners are working to better advantage, especially in South Carolina, where both river and land rock are being mined in larger quantities. Prices of South Carolina rock are steady, with values unchanged. In Florida the shipments from the ports are increasing, and in both pebble and land rock values are firmer. The Tennessee miners are actively engaged, and the output at Mt. Pleasant increasing. Several large contracts were let during the past week for furnishing rock from sections east of that town, and it is estimated that shipments, domestic and foreign, for the month of July will be the largest on record. Prices are about steady, but not quotably higher. There has been considerable business in phosphate charters in New York during the week, and among those reported are the following: British steamer South Gwalia, 1342 tons, from the South to the United Kingdom or Continent with phosphate rock on private terms; British steamer Naparima, 1043 tons, from Tampa to Ghent with phosphate rock on private terms; British steamers Glenisle, 1248, Kirkstall, 1162, and Elfie, 1229 tons, from Pomaron to Charleston, Savannah or Port Royal with sulhpur at or about 10/, July, August and September, respectively; schooner Senator Sullivan, 654 tons, from Charleston to Cartaret with phosphate rock at $1.75; schooner Madeline Cooney, 695 tons, from Charleston to Baltimore with acid phosphate on private terms, and a British steamer, 1700 tons, from Tampa to La Pallice and (or) Honfleur with phosphate rock at 20/, July.

Fertilizer Ingredients.

The general market is dull, with little or no demand. Ammoniates are quiet, but steady. Stocks in the West are reported to be normal. There is a slightly-increased demand from the East, and the expected advance in freight rates South on the 25th inst. should improve business, if only for the time being.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)	$2 45	@	——
Nitrate of soda	2 00	@	——
Blood	1 85	@	——
Hoof meal	1 70	@	——
Azotine (beef)	1 80	@	——
Azotine (pork)	1 80	@	——
Tankage (concentrated)	1 65	@	——
Tankage (9 and 20)	1 80	and	10
Tankage (7 and 30)	17 00	@	17 50
Fish (dry)	20 00	@	——
Fish (acid)	12 00	@	——

Phosphate and Fertilizer Notes.

The British steamship Ness cleared last week from Savannah for Stettin with 4150 tons of Florida phosphate rock, valued at $41,500; cargo by Strachan & Co.

It is stated that Mr. C. S. Jackson, of Mt. Pleasant, Tenn., has recently closed a deal with the Blue Grass Phosphate Co. to furnish that company 5000 tons of phosphate rock from the mines on his property east of that town.

At Fernandina, Fla., there is more activity in the movement of phosphate rock and last week there were four steamers and seven schooners entered at the custom-house. Charters made already indicate about 25,000 tons of phosphate rock to be shipped, and it is said that this will not cover the entire output.

The shipments of phosphate rock from

the port of Punta Gorda, Fla., for the month of June were as follows: Schooners Augustus Welt, 1750 tons; W. J. Lemond, 1350 tons; Talofa, 1650 tons; Andrew Adams, 1180 tons, and Madeline Cooney, 1155 tons, or a total of 7085 tons; previously reported, 17,095 tons, making a grand total of 24,180 tons.

The shipments of phosphate rock from the port of Charleston, S. C., for the week ending 15th inst. were as follows: Schooners J. H. Parker, 754 tons, and D. K. Baker, 750 tons, both for Elizabethport, N. J., and schooner Warner Moore for Georgetown, D. C., 675 tons acid phosphate. The total shipments from September 1, 1897, to July 15, 1898, amounted to 83,490 tons, against 84,309 tons for the corresponding period last year.

At a recent meeting of the stockholders of the Greenville Fertilizer Co., of Greenville, S. C., the following directors were elected: O. P. Mills, Henry Briggs, Frank Hammond, W. C. Cleveland, of Greenville, and J. B. Keckeley, C. P. Poppenheim and Louis Danneman, of Charleston, S. C. The officers elected were: I. P. Miller, president and treasurer; Frank Hammond, vice-president; Alexander McBeth, secretary. H. A. Keckeley was elected superintendent, to succeed D. W. Ebaugh. A dividend of 8 per cent. was declared.

The activity in the Tennessee phosphate belt reported for June continues unabated, and for the current month shipments, both domestic and foreign, will be heavy. The Tennessee Phosphate Co., of Mount Pleasant, is now running with full force and is filling four foreign orders for rock, the company shipping about 600 tons a day. The orders of this company call for 10,000 tons to be shipped this month from Pensacola. The General Phosphate Co. has three foreign orders calling for 8500 tons. Besides these foreign shipments, a number of orders have been received from domestic sources throughout the country. Other mining sections are also making large shipments of rock.

Mr. H. Clay Tunis, of Baltimore, has recently purchased from the Scranton & North Carolina Land & Lumber Co., of Hyde county, North Carolina, its saw mill, dry-kilns, railroads and 23,000 acres of timber land in Hyde and Beaufort counties, said to contain 100,000,000 feet of lumber. This timber is said to be among the best of North Carolina pine. Mr. Tunis expects to manufacture about 25,000,000 feet of lumber per annum. He will take possession of the property on August 1. The mills are located on Pungo river, near the southern terminus of the Norfolk & Southern Railroad, about 100 miles south of Norfolk. Shipments of lumber from that section are made to Northern ports by vessels out of Ocracoke inlet, and to Norfolk and Baltimore through the Albemarle & Chesapeake canal and the new Dismal Swamp canal, which is now being deepened and widened by Baltimore capatilists, headed by W. B. Brooks, Jr., and Alexander Brown, of Alexander Brown & Sons.

The Maryland Steel Co., of Sparrow's Point, has secured a contract from the government for the building of ten gun carriages for 12-inch guns. The first carriage is to be delivered by October, and one will be turned out each month after that. This will keep the foundry and machine shop busy for a year.

Mr. E. B. Miller, formerly of Huntsville and Tuscaloosa, has been elected commercial agent of the Birmingham Commercial Club.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction epartment.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., July 21.

The week under review shows very little change in the general condition of the local lumber market, and transactions have been of moderate volume. Receipts of yellow pine have been lighter, but stocks on hand are ample for all requirements. The demand for air-dried lumber is light, and boxmakers, yardmen and planing mills are well supplied. There is some inquiry from out-of-town dealers, and considerable business has accrued from this source. Prices for air-dried yellow pine are about steady, with a good offering and moderate demand. In kiln-dried North Carolina pine there is considerable inquiry, and prices firm for desirable grades, both for home and export trade. In white pine dealers report a fair business, with values steady and unchanged. Cypress is dull, with a light inquiry. In hardwoods there is only a limited business, being confined to out-of-town dealers, with some inquiry from local builders for interior finish. The export business is quiet, and shippers are sending out very few orders, being satisfied to wait for more favorable reports from the European market.

Savannah.

[From our own Correspondent.]
Savannah, Ga., July 18.

Business in nearly all lines of the lumber market in this section of the State is showing considerable improvement, and the reports from milling sections are generally encouraging. Business at Brunswick and Darien is fair, and shipments are expected to show an increase from this time forward. Timbermen at Darien are very much encouraged by the recent rain, which has given plenty of water to float their logs, notably cypress, of which there is a large lot expected on this rise. At interior milling sections throughout the State the various mills have orders sufficient to keep them steadily running, while prices for the various grades of lumber are generally firm. The market here on Saturday last closed firm, with considerable business in sight, and prices ranged as follows: Minimum yard sizes, $11; car sills, $11.50; difficult sizes, $12.50 to $14; ship stock, $16.50 to $18; sawn crossties, $9.50 to $10; hewn crossties, 33 cents per tie, all f. o. b. During the past week the following shipments were reported: Schooner John H. Tingue for Boston with 369,517 feet of pitch-pine lumber, by E. B. Hunting & Co. New York steamers cleared with 680,000 feet of lumber and Baltimore steamers 184,630 feet. Freight rates on lumber are down to normal, and from this and nearby ports $4.50 to $5.50 are the figures for a range including Baltimore and Portland, Me. Railroad ties to Baltimore, 13½ cents, to Philadelphia 14½ cents, and to New York 16½ cents. Steamer rates to Baltimore $6, Boston $7 and New York $7.75. The schooner Johanna Swan was chartered last Saturday in New York to load lumber and ties at Brunswick, Ga., for New York on private terms.

Mobile.

[From our own Correspondent.]
Mobile, Ala., July 18.

The volume of business at this port in lumber and timber last week was light, and the market very quiet. The timber market, both for hewn and sawn timber, is exceedingly dull, with nothing going out during the past week, and few contracts are being made for future delivery. There is a better offering of small tonnage, which will likely take out considerable material during August for Central and South American ports. Hewn timber is still quoted nominally at 11 to 12 cents, basis of 100 cubic feet, average B1 good. Hewn oak and poplar are dull. Sawn timber is in light demand, and when placed upon the market will bring 9½ to 10 cents per cubic foot, 40-foot basis. Cypress is quoted at 6 to 9 cents per cubic foot, according to average. Saw logs are in fair demand at $4 to $6 per thousand superficial feet. Shippers are governed entirely by the markets in Great Britain and the Continent, and under present conditions very little new business is being done. Of the pitch-pine market in Great Britain the London Timber Trades Journal of the 9th inst. says: "The sught depression noticed in pitch-pine last week is apparently wearing off, and a much firmer tone prevails at the present moment in respect both to freight and tonnage. Should this position continue, no doubt its effect will be to keep prices from any further decline. We think, in respect to pitch pine, as well as other descriptions of timber, sawn or hewn, that prices for the remainder of the year will be dependent entirely on freights. We hear all sorts of reports of sales of timber cargoes from the Mexican Gulf at prices ranging from 45s. upwards, but we question very much if, in view of the difficulty in obtaining tonnage, any shipper would be inclined to sell c. i. f. under 48s. for 35-foot average." During the past week only several small lots of lumber were shipped. The steamer Habil for Bocas del Toro took out 14,000 feet, and steamer Managua with 5000 feet and schooner Smith with 75,000 feet, both for Belize. The total shipments of lumber from this port from September 1, 1897, to July 15, 1898, amounted to 46,539,956 feet, against 64,272,570 feet for the corresponding period last year. Lumber and timber freights are unchanged. Rates to the West Indies on lumber, $7 to $9; Mexico, $8 to $10; Rio Janeiro, $16; River Platte, $13.50, and coastwise, $6 to $7. Timber and lumber by steamer to the Continent and United Kingdom per standard £5 15s. 6d.; sail per load for hewn timber 33s., and sawn per standard £5 2s. 6d. The British steamer Cape Corrientes was chartered on Saturday in New York to load at Pensacola for United Kingdom or Holland with sawn timber at 113/9, or Antwerp 115/.

Beaumont.

[From our own Correspondent.]
Beaumont, Texas, July 18.

The situation here today indicates a fairly active market for all classes of wood products, and the current demand holds on remarkably well under all conditions. The movement during the past week has been active, and numerous inquiries are being daily received for prices, etc. Throughout the State there has been considerable lumber going into consumption, and when the harvest is over the demand for lumber for improvements is likely to be very decided. From all points in the Northwest a good demand is expected, as it is evident, from the many inquiries from that section, a large amount of actual business will come to this point. Prices for all desirable grades of lumber continue firm. The export trade continues quiet, and until prices materially improve in the European markets shippers will hold off.

Lumber Notes.

The lumber firm of Robert R. Sizer & Co., of New York, has opened offices in Brunswick, Ga., and will ship through that port. S. A. Sizer, a member of the firm, will represent the company in Brunswick.

The Altamaha Lumber Mill, at Brunswick, Ga., which has been shut down for some time on account of scarcity of timber, resumed work on Monday last.

A charter was granted last week to the Everett Lumber Co., of Everett's, Martin county, North Carolina, with a capital of $25,000. The incorporators are G. P. McNaughton and others.

The old mill of the Wilson Cypress Co. at Palatka, Fla., will shortly be removed and a much larger structure of double capacity will be built. Work on the foundation of the new mill has already commenced.

The following officers of the Builders' Exchange Building Co., of Baltimore, were elected last week by the directors: President, James A. Smyser; vice-president, J. L. Lawton; secretary, E. D. Miller; treasurer, B. F. Bennett.

Receipts of building material at the port of New Orleans for the week ending July 15 were as follows: Lumber, 1,769,000 feet; shingles, 195,000; laths, 45,000, and oak staves, 185,279. The total receipts of lumber for the season were 69,665,126 feet, against 68,312,000 feet last year.

A charter was issued last week to the Penn Lumber Co., of Aberdeen, N. C., with a capital stock of $25,000. The incorporators are R. A. Wagner, of Frackville, Pa.; Abner Scott, W. A. Marr, John P. Maurer, of Pennsylvania; W. W. Maurer and George Burchill, of Aberdeen.

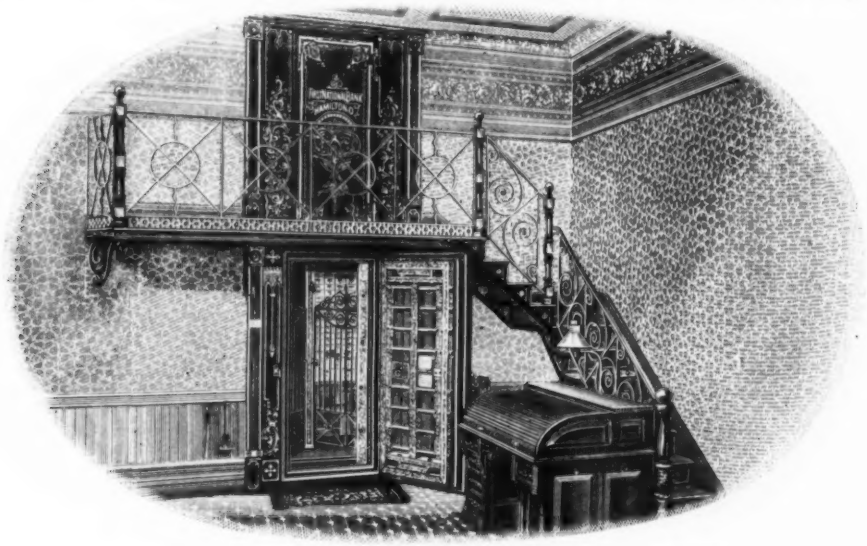
The Southern Lumber Manufacturers' Association held its annual meeting in Shreveport, La., on the 12th inst. The meeting was a representative one in every respect and one of perfect harmony. Mr. J. C. Enochs delivered his annual address, after which the following committees were appointed: Price-list, insurance, uniform grading, resolutions and audit. The treasurer's report was submitted, after which the meeting adjourned, the sessions of the day being closed. At the second day's session the committees made their reports, which were accepted. It was decided to ask the Nashville Hardwood Association, which met in Chicago on the 19th inst., to adopt the Southern Lumber Manufacturers' Association's specifications. It was also decided to incorporate the association. The next annual meeting will be held in Memphis in January next.

Shipments of lumber from Texas and Arkansas have been unusually heavy during the past six months, and the cut for both States for the same period shows increasing activity among the mills. The Dallas (Texas) News says: "Yellow pine clearing-house reports for the past few months have reached high-water mark. During the first five months of 1898 Texas cut 117,505,000 feet, and for the period stated was only exceeded by Arkansas, with 119,594,580. Incomplete returns for the June cut add 11,833,585 feet to Texas and 15,064,955 feet to Arkansas, making the ascertained semi-annual 1898 total for Texas 129,338,635, as against 134,659,535 for Arkansas. The magnificence of this showing for Texas has attracted widespread interest, and henceforth the State will be a recognized power in the lumber world. In shipments Texas leads the list for the first six months of the present year, the figures being as follows: Texas, 135,643,528; Arkansas, 128,721,563; Mississippi, 102,879,400; Louisiana, 84,288,634; Alabama, 40,505,985; Missouri, 38,904,788. The total cut of the States named for the first six months of 1898, 546,801,871 feet; total shipped, 530,943,898."

MECHANICAL.

Safety Deposit Vault.

This vault measures twelve feet wide, eight feet deep and nine feet high on the inside, and embodies two principles in the construction which no other manufacturer in the United States ever attempted, its builder claims. The whole body of the vault, viz., the top, back, bottom and both ends and the front, are composed of five layers of steel, each one-half inch thick, aggregating two and one-half inches. Four of these layers are chrome steel, and the inner layer is of Bessemer. The chrome steel layers consist of as follows: The first, or outer one, of spider angles, 4x4x½ inches, covering each of the eight corners, and the legs of these angles ranging three ways and welded into one piece. Between the ends of these angle legs, and completing the edges, extend other 4x4x½-inch chrome steel angles, brazed together, so as to make the twelve outer edges practically one piece of solid angle. Between the edges of these angles range the half-inch chrome steel plates, in full lengths, and of suitable widths, from eighteen inches to twenty-four inches wide, and every edge ground to fit accurately. This makes the whole outside surface of the vault practically one sheet. Now, the second layer is composed of larger angles, 6x6x½ inches, mitered, bent and welded into solid corners, and having other angles of the same thickness and dimensions extending between the ends, so as to complete the twelve edges, and between the edges of these angles range the chrome steel plates, so placed that no joint of two plates in the second layer shall come within six inches of a like joint of two plates in the other layer. The third layer is still stronger. The angles are 8x8x½, and bent and welded same as in the other two, and the plates ranging between them and spaced exactly the same way. In the fourth layer the maximum strength is attained by using angles 12x12x½ inches, bent and welded same as the other three, and plates of the same thickness ranging between the inner edges. The fifth, or inner layer, is of Bessemer steel, one-half inch thick, rolled to perfectly smooth surfaces, and butt-jointed with each other in the inner apexes of the angles in the fourth layer and of largest widths possible of use. Now, the peculiar part of the construction of this vault is this: Vault builders usually construct this sort of work with mixed metal screws one inch long and one inch in diameter, threading into the outer plate, and the heads countersinking into the inner surface of the second plate, and in like manner the second to the third, and the third to the fourth, and so on. Some use what are called conical bolts, threaded through and through, from the outer layer to the inner, and firmly riveted into square countersinks on the inner layer. In order to give this bank a special vault of strength not heretofore equaled in the State of Ohio both systems of construction were used.



SAFETY DEPOSIT VAULT.

This particular vault was built under the supervision of the well-known mechanical engineer, James W. See, of Hamilton, O. His acceptance of same when completed and his report of its construction is a most forcible one. Experts from the Treasury of the United States who have had business with the bank have not hesitated to speak most emphatically concerning the construction and finish of this work.

This vault was constructed by the Cincinnati Safe & Lock Co., of 41 Elm street, Cincinnati, O., and it is prepared to furnish any work in its line.

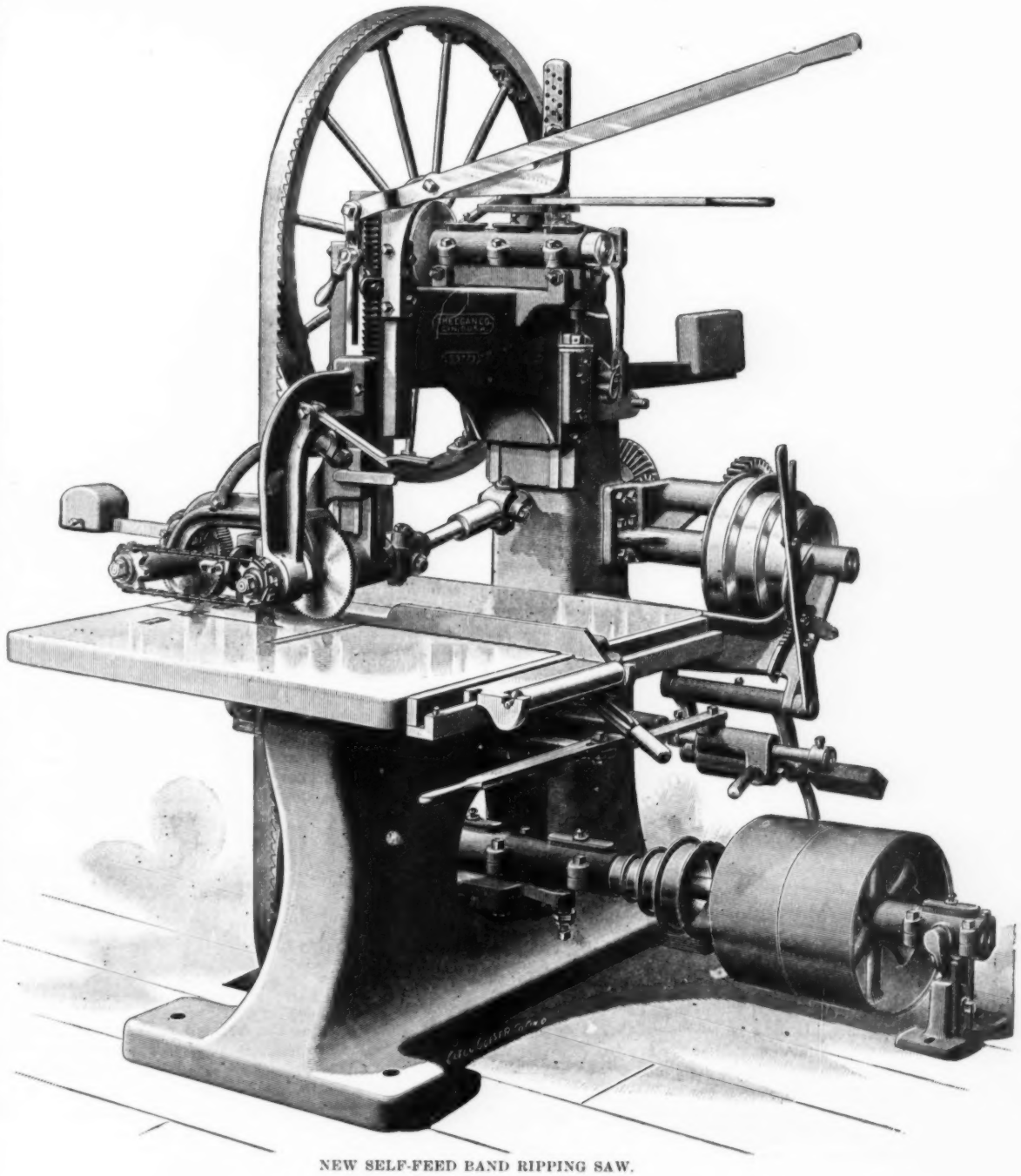
New Woodworking Machine.

The new self-feed band ripping saw cannot fail to deeply interest those who are engaged in the reduction of lumber to exact paralleled widths for flooring, ceiling, siding, car roofing and decking, molding, chair and furniture stock and the numberless other products that must primarily be reduced from the wide board or plank into suitable dimensions.

This machine will rip material to a width of twenty-four inches and a thickness of ten inches; will carry a saw-blade three inches wide, and is regularly provided with three speeds of feed, viz., fifty, 100 and 150 feet per minute.

Woodworkers will readily see the advantage of having a machine of this class by reason of the saving in driving power and the great capacity of the machine, together with the slight kerf taken out by this band-saw blade in comparison with the circular saw.

The designer of this machine is the Egan Company, 228 to 248 West Front street, Cincinnati, O., and it will be pleased to give any further particulars, including full technical description, in regard to it or quote special prices.



NEW SELF-FEED BAND RIPPING SAW.

The Standard Fans.

In the light of subsequent achievement it seems to have been but a short, easy and natural step from the combination of the big, slow, troublesome and ugly belt fan that would do the work and the little, fast, handsome and otherwise satisfactory buzz fan that would not, to the quick-moving, highly-efficient, handsome, modern electric ceiling fan that combines

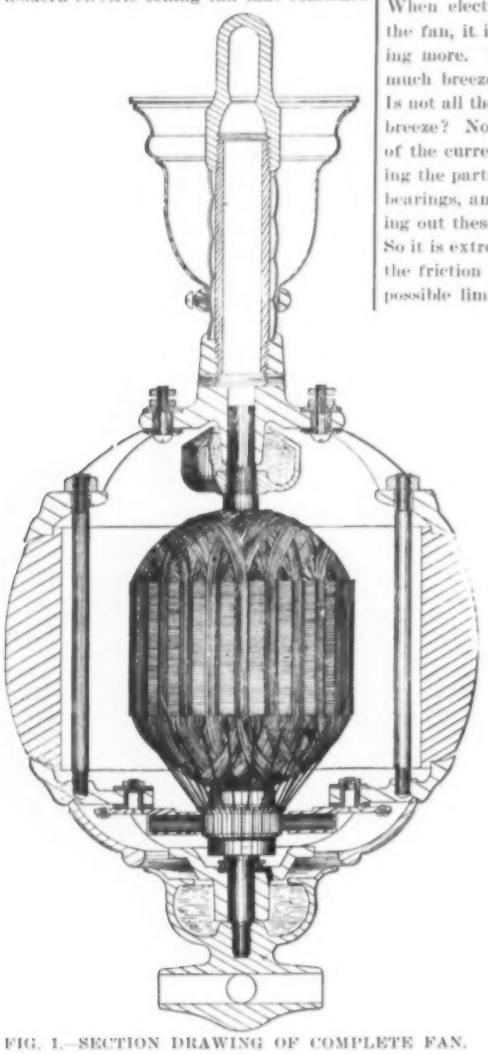


FIG. 1.—SECTION DRAWING OF COMPLETE FAN.

FIG. 2.

all the merits, with none of the faults of either of the old types. The Philistine would say, "Take the small blades off the little motor, hang it on the ceiling, and put on the big blades, and there you are." But there you are not. The problem has been solved, and the Robbins & Myers Co. claims to have the correct solution. It could not be known at once all the conditions to be met. However, as now known, the conditions, briefly stated, are these: The cost of production must be low enough to bring the selling price within the reach of the customer. The speed must be over 100 and under 200 revolutions per minute, or it will have no effect on the flies. It must be noiseless, or it will not do in quiet places. It must be self-oiling; that is, it must contain oil enough in suitable reservoirs to last all summer, and these reservoirs must be so arranged that the oil will flow constantly through the bearings and back into the cups while the fan is running; for, when a man buys an electric ceiling fan, he does not want to be bothered climbing up a step-ladder to oil it every day—he might as well have kept his old belt fans; and this oil must be positively confined, so it cannot drip on the carpet or goods, or someone's head. The wearing parts of a fan must be so arranged that they will adjust themselves for wear; the brushes must feed all up, and then fly out where they will do no harm, and simply stop the fan until new ones are put in; the cost of running must be kept down to the lowest possible limit; that means high efficiency. When electric current is bought to run the fan, it is simply buying breeze, nothing more. The question should be, how much breeze is obtained for the money? Is not all the current used for making the breeze? No; in some fans the larger part of the current is said to be used in heating the parts of the fan and in friction in bearings, and only what is left after taking out these losses is turned into breeze. So it is extremely important to keep down the friction and heat losses to the lowest possible limit. The fan will not run itself; it is not a source of power; it only receives power through a current of electricity, and the current gives out power in forcing its way through the fan, just as steam gives out power in forcing its way through the steam engine. Another question answered: It is not impossible, but is impractical, to run ceiling fans by any form of battery; they must be connected to a dynamo located either in your own building or in some central station that makes a business of furnishing electric-power for motors. For technical description of the different parts of, and other information concerning, this fan address the manufacturer, the Robbins & Myers Co., of Springfield, Ohio.

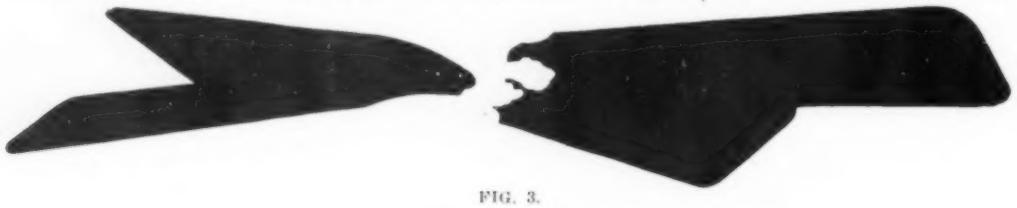
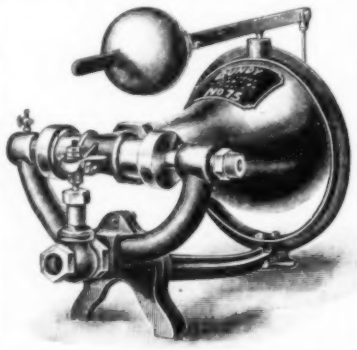


FIG. 3.

High-Pressure Tank Steam Trap.

The Bundy high-pressure tank steam trap is manufactured by the A. A. Griffing Iron Co., of Jersey City, N. J., and listed in catalogue as the 75 series. This trap is specially designed for draining receivers, reheating coils, cylinder jackets on compound engines, or, in fact, any apparatus working under extremely high pressure, as they are constructed so as to operate under 250 pounds to the square inch. The traps are fitted with valves having a specially devised disc and seat that will open and close as easily under 250 pounds pressure as under one pound. In other words, the operation of the valve is in no wise retarded by high pressure, which has been one of the most difficult problems to overcome in trap application on the class of work for which these traps are intended.



HIGH-PRESSURE TANK STEAM TRAP.

The trunnion stuffing-boxes are packed with a specially-prepared spiral packing manufactured by a well-known concern, leaders in their line. This insures against leaking. The higher the pressure, the tighter it becomes. This, however, does not interfere with the operation of the trap, since the travel on the trunnion bearings will admit of enormous pressure and without causing undue friction; in fact, it may virtually be described as a frictionless trap. The trap is adjusted by allowing all parts to become thoroughly heated before tightening of the stuffing-box nuts. These will, in all probability, start leaking a trifle when steam is first turned on, which is allowed to continue until the highest degree of heat has been reached; then, if the expansion of the packing has not stopped the leakage, the nuts are tightened very slowly until no steam escapes, but no further, as the packing will then hold under any pressure.

The actuating power of this trap, as in all of the Bundy make, is the reliable, never-failing one of gravity. The combined weight of the bowl and water which it contains will overbalance the ball weight on lever. The momentum acquired by the bowl in its downward course will be sufficient to open the valve, thus allowing the waters of condensation to escape, which water the trap will elevate two feet in height for each pound of pressure carried. An inverted bent pipe in the interior of trap bowl forms an effective water seal.

The operation of the trap is, by necessity, positive, since the dropping of the bowl with the added weight of the water must open the valve. When the contents have been discharged the ball weight, being heavier than the empty bowl, causes it to rise in the frame and close the valve.

The trap is composed of the best material obtainable to insure strength and long life; is tested to 300 pounds live steam pressure before shipping, and is warranted by the maker to give satisfaction. The trap undoubtedly belongs to the highest grade of steam specialties.

The manufacturer solicits the correspondence of all interested in this class of goods, and will furnish full detailed information relative to sizes, etc., together with lowest prices, upon inquiry.

T. R. Neal has been re-elected president of the Chamber of Commerce of Atlanta. The other officers are: Vice-presidents, J. G. Oglesby, Rufus B. Bullock and Lewis H. Beck; treasurer, Paul Romare.

Interesting Bits of the Mountains.

The hills and mountains of New England are known far and wide as the great recreation and vacation ground of the United States.

Within the confines of Maine, New Hampshire and Vermont, where the White and Green mountains are located, are the noted resorts of Fabyans, Mount Pleasant, Crawfords, Twin, Bethlehem, Maplewood, Profile House, Littleton, Sugar Hill, Franconia, Jefferson, Whitefield, Colebrooke, Lancaster and a score of fully as reputed resorts, each offering attractions of an interesting character. Crawfords lays stress upon the wonderful notch within which it is situated. Bethlehem and Maplewood are in a region the air of which is particularly beneficial to hay-fever sufferers. At the Profile House everything is interesting, for it is here that the Old Man of the Mountain stays. Canon mountain, Eagle mountain and half a dozen other cliffs and peaks surround the valley wherein is this delightful resort. Echo lake and Profile lake are close at hand, while a delightful drive brings the tourist to that favorite and marvelous bit of nature's handiwork, the Flume. The walks and drives in the vicinity of the Flume House are admirable, and every influence which tends to please the traveler is included in its environs. The Mount Pleasant House and Fabyans, only a short distance from the Presidential Range, offers unsurpassed attractions for the vacationist. The walks, drives and cycle paths are through the prettiest parts of the region thereabouts, while the arrangements for conducting amusements like golf, baseball, tennis and cricket are perfect in every detail.

Every visitor to the White mountains should ascend Mount Washington. The ride to the summit is thrilling, and every moment reveals some new and important feature. On a good, clear day there is no limit to the sights to be seen. The great hotels below are like toy houses. The forest city of Portland is seen to the eastward, while Winnipesaukee, Sebago and Moosehead lakes sparkle in the sunlight like sheets of bright silver. In the immediate vicinity of the Summit House are numerous interesting points worth visiting. There is the Tip Top House, erected many years ago; the Observatory, formerly used by the United States Weather Bureau, and the Lizzie Bourne Monument, while the natural attractions worthy of attention include the Lake of the Clouds, Tuckerman's Ravine, the Gulf and the Alpine Garden; and so on every locality has its own specific and important features, each worthy of all the attention you can give it. Last, but not least in points of attractiveness, are the hotels of the region, mammoth and fully-appointed hostelries, where every care and convenience for the traveler is considered, while the cuisine is equal to that of the metropolitan houses.

If you are interested in the mountains, send a two-cent stamp to the General Passenger Department of the Boston & Maine Railroad, Boston, for the finely-illustrated brochure entitled "Among the Mountains," and with it you will get a tour-book giving a list of all the hotels and boarding-houses in the mountains, with maps, stage connections, train service, etc. Write for it; it will be of service to you. †

The P., W. & B. R. R., with the desire to further accommodate its Rehoboth patrons, has arranged for a special fast train to leave Porter on the arrival of train leaving Baltimore at 3 P. M. on Saturday, the 16th inst., and each Saturday thereafter during the months of July and August. By this service there will be no change of passengers or baggage en route, as passengers will be delivered by a fast run at Rehoboth at 7.30 P. M., in time for supper and the usual Saturday evening entertainments. Returning, this special fast train will leave Rehoboth on the following Mondays after early breakfast, passengers being delivered without transfer at Baltimore at 11.15 A. M.

No doubt this service will be extremely well patronized by persons desiring to visit their cottages and spend Sunday at the shore. †

CONSTRUCTION DEPARTMENT.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Attalla—Iron Furnace.—It is rumored that the Southern Iron Co.'s charcoal furnace will resume operations soon; rumors say also that L. S. Colyar, of Rome, Ga., will be again interested in the plant.

Bessemer—Water-works Extensions.—The Bessemer Water Works, referred to last week, is enlarging the present reservoir and erecting an additional one to improve and increase supply; G. H. Stevenson, superintendent.

Birmingham—Pipe Works.—It is stated that a party has announced his intention to construct a plant for the production of soil-pipe and kindred articles. Names of interested parties will be announced later.

Birmingham—Pipe Works.—The Ahrens & Ott Manufacturing Co., of Louisville, Ky., has purchased the Birmingham Pipe Works; will overhaul and put the plant in operation.

Cordova—Coal Mines, Coke Ovens, etc.—The Ivy Coal & Coke Co. has purchased from B. M. Long, of Jasper, 12,000 acres of coal lands in Jasper county, near Cordova, for $160,000, and will develop same, erecting additional coke ovens, by which the output of the company will be greatly increased.

Demopolis—Steamboat Company.—A company has been organized, with capital of $15,000, to establish a steamboat line; J. R. Robertson, president, and John B. Meriwether, secretary-treasurer.

Ensley — Coal Washer. — The Tennessee Coal, Iron & Railroad Co. has commenced the erection of another coal-washing plant at Slope No. 4; its output is to be used exclusively by the Semet-Solvay by-product coke plant, now in course of construction. Another coal washer will be erected at Slope No. 5 for same purpose.

Florence—Flour Mill.—The Florence Milling Co.'s flour mill, recently reported, will soon be completed; it will have elevator capacity of 15,000 bushels, daily capacity of 150 barrels each of flour and meal, and will cost $16,000; will employ twenty-five men.

Florence—Oil Mill.—The proposed oil manufacturing company, recently referred to, has organized, with C. W. Ashcraft, president and general manager, and Erister Ashcraft, secretary-treasurer; contract has been awarded for two buildings, 48x112 feet and 40x80 feet, respectively, and for $20,000 equipment of cottonseed-oil machinery. Address the manager.

Horsecreek—Coal-land Development.—Col. B. M. Long, of Cordova, Ala., has sold to English and Canadian capitalists for $150,000 large tracts of coal lands in Walker county, near Horsecreek; it is no doubt the intention of the purchasers to thoroughly develop the property.

Lafayette—Electric-light Plant.—Bids are wanted for furnishing and constructing an electric-light plant for the city, to have a capacity for twenty-five 2000-candle-power arc and 800 incandescent lights; estimated cost $10,000. Address Charles Schurssler.

Mobile—Electric Plant.—The Mobile Light & Railway Co. is installing a new 160-horse-power engine.

Sheffield—Rolling Mill.—The Sheffield Rolling Mills will resume operations in a few weeks, employing 500 men.

Sunflower—Saw Mills and Timber Lands.—The F. E. Creeland Lumber Co., of Cairo, Ill., has purchased 50,000 acres of timber lands in the vicinity of Sunflower Bend and established a large saw mill; other timber lands are being purchased by the company and a mill of 100,000 feet capacity will be built; B. F. Bates, of Sims Chapel, Ala., is the company's local agent.

ARKANSAS.

Fort Smith—Shoe Company.—The Stone Shoe Co. has filed articles of incorporation with capital stock of $5000; Charles R. Stone, Welford White and Wilbur S. White are the corporators.

Little Rock — Water-power Development, etc.—George C. Strong (address P. O. Box 93) writes regarding the proposed water-power development mentioned last week as follows: "Purchased land along the Ouachita river and have good place for a dam prepared and intended by nature; rock bottom stream fed by spring about 500 feet wide and two to four and one-half feet deep; will build dam 750 feet long, 20 feet high, and hope to have 5000 horse-power and carry same by wire to Little Rock."

FLORIDA.

Jacksonville—Building Company.—Letters patent were recorded of the Southern Building Co., with a capital of $50,000, for purpose of contracting for and performing all kinds of mechanical, electrical, architectural and marine work, public and private; to do mining, manufacturing, etc.; incorporators, William O. White, Walter C. Robinson and John W. Hood. Address first named.

Jacksonville—Sugar Mill.—The Duval & Clay Sugar Co., capital $300,000, will increase its capital stock for the purpose of raising funds to be used for improving its property and erecting a new mill; plant is located on St. John's river, about ten miles south of Jacksonville. For information address J. F. Eldridge, treasurer, Orange Park.

Lake City—Saw Mill.—The East Coast Lumber Co. is increasing its saw mill's capacity by adding new machinery.

Palatka—Saw Mill.—The Wilson Cypress Co. will erect a new mill of double the old one's capacity.

GEORGIA.

Barnesville—Ice Factory.—J. B. P. Milner is figuring on the erection of an ice factory of from five to ten tons capacity; power is ready.*

Columbus — Telephone System. — E. W. Coleman has applied to the city council for franchise to establish telephone system.

Dublin—Woodworking Factory.—E. J. and W. E. Fuller will establish a woodworking factory and currycomb factory.

Marietta — Knitting Mill.—The Marietta Knitting Co. has increased its capital stock from $7500 to $22,000.

Milledgeville—Water Works.—The American Pipe Manufacturing Co., of Philadelphia, Pa., operating the water-works system at Milledgeville, has purchased the Moran Springs, near the city, and will lay additional pipe; the springs have a flow of about 2,000,000 gallons per day.

Milledgeville—Water-works Improvements. The American Pipe Manufacturing Co., of 112 North Broad street, Philadelphia, Pa., has purchased, as reported last week, the Moran Springs and will utilize same in procuring increased water supply for its plant in Milledgeville. At some future date the works will be extended as contemplated.

KENTUCKY.

Ashland—Steam Laundry.—J. Geiger and Mr. Weymeyer will establish a steam laundry.

Louisa—Marble Works.—R. L. Hopkins will establish a marble yard.

Louisville—Drug Company.—The Simon N. Jones Co. has been incorporated, with a capital stock of $7500, by Simon N. Jones, Thos. S. Jones, S. W. Jones and others. Address Simon N. Jones.

Louisville—Oil Refinery, Soap Factory and Ice Factory.—The Globe Refining Co. will rebuild immediately on a much larger scale its burned $75,000 cottonseed-oil refining plant and soap factory; the work of rebuilding will be pushed night and day to completion; an ice factory will also be built. Machinery of all kinds used in the plants referred to are being negotiated for; Louis K. Ferguson, president.*

Louisville — Glass - Bottle Works. — The Standard Bottle & Glass Co., of Rochester, N. Y., which has been noted recently as to remove its plant to Louisville, writes that no definite decision has been reached in the matter.

Metropolis — Woodworking Factory.—Harris, Cole & Co., of Cedar Falls, O., will remove their sash and finishing factory to Metropolis; 300 people will be employed.

Middlesborough—Coal Mining, etc.—The Excelsior Coal Co. has built a new tipple recently and made other improvements to facilitate its mining, etc.

Winchester—Tobacco Factory.—Waller P. Azbill has established a twist-tobacco factory.

Winchester—Planing Mill.—R. P. Scobee & Son will rebuild their planing mill which was burned recently.

LOUISIANA.

New Orleans—Dry Docks.—The New Orleans & Western Railroad Co. will make some extensive improvements at Port Chalmette, which will cost about $200,000 and include the construction of four new docks, 350x90 feet, 300x150 feet, 150x100 feet, 1500 feet, with a depth of forty or fifty feet, respectively; this dock will be the extension of the old one now in use; all these new wharves will be covered with storehouses, and the specifications call for two trestle approaches.

MARYLAND.

Baltimore — Air-brake Works. — Arrangements have been completed for the combination of the Westinghouse Air Brake Co., of Pittsburg, Pa., the Boyden Air Brake Co., of Baltimore, and the American Air Brake Co., of St. Louis, Mo. It is intimated that the result of this consolidation will be the extension of the present Boyden plant in Baltimore and the erection of an entire new factory. The Westinghouse Air Brake Co. can be addressed.

Baltimore—Machine Works.—The Gardner Manufacturing Co. has been incorporated for the purpose of manufacturing gas machines for generating gas; incorporators, Joshua G. Gardner, Andrew G. Stielman, James Russell, Lawrence O. Wright and Edward L. Ward; capital stock $5000. Address Joshua G. Gardner.

Barton—Coal Mine.—The Barton Mining Co. is opening a new coal vein.

Bradshaw—Telephone System.—The Baltimore & Harford County Telephone Co., Dr. James H. Gorsuch, president, has been granted permission to build a telephone system from Bradshaw to Reckord.

Cumberland—Water-works Improvement.—The mayor has asked the city council to appropriate $2000 to enable the board of water commissioners to recommend some definite plans to improve the water supply. The mayor recommends the construction of sewers.

Williamsport — Electric-light Plant.—The town will make arrangements for the issuance of $20,000 of bonds for the construction of an electric-light plant. Address M. Emmett Cullen, town treasurer.

MISSISSIPPI.

Grenada—Ice Factory.—George M. Brown, of Louisiana, will rebuild his ice factory, which has been destroyed by fire, but probably not until next season.

Jackson—Oil Mill, etc.—Incorporated: The Central Cotton Oil Co., capital stock $35,000, which may be increased to a maximum of $100,000. The incorporators are M. Frank, E. Cahn, M. E. Cahn and C. H. Alexander. The company's purpose is manufacturing and selling all finished products of cottonseed, also vegetable oil and soap, and operating a compress and gins. The company will erect and operate the oil mill lately reported as projected by E. Cahn, of Meridian, Miss.

Magnolia—Telephone System.—It is proposed to establish a telephone system of seventy-five instruments and 100-drop switchboard; T. B. Lampton can give information.*

Sardis—Water Works.—The city will hold an election on July 25 to determine the construction of a system of water works. Address "The Mayor."

Vicksburg—Cotton Ginnery.—The Advance Gin & Mill Co. is making preparations to improve its plant. The recently noted incorporation of this company was for the purpose of continuing the business, which had been in operation as a partnership for five years. A battery of twenty roller gins will be erected.

West Point—College.—Incorporated: The West Point Business College, capital stock $25,000; G. A. Macon, president.

MISSOURI.

Kansas City.—Chartered: The Kansas City College of Pharmacy and Natural Science Association, with a capital stock of $3000, by W. H. Kuhne, J. H. Love, David Walker and others.

St. Louis—Electric Plant.—The Southern Electric Railway Co. is erecting a new office building which is to cost $30,000, and is also making extensive improvements in its power plant, which will cost $130,000. A new 1500-horse-power engine will be put in, a 1500-horse-power electric generator and new Heine safety boilers.

St. Louis—Mining Company.—The Henry C. Mining Co. of West Virginia has been incorporated, with a capital stock of $110,000; capital to be employed in Missouri, $15,000.

St. Louis—Plumbing Company.—The M. J. Ward Plumbing Co. has been incorporated, with a capital stock of $2000, by M. J. Ward, W. M. Schwher and W. H. Kuhne. Address the first named.

St. Louis — Haberdasher. — Incorporated: The Fred Geitz & Sons Men's Furnishing Goods Co., with a capital stock of $10,000, by Fred Geitz, August Geitz and William Geitz.

St. Louis—Lead Company.—Incorporated: The Renault Lead Co., with a capital stock of $300,000, by Harry Cantwell, Arthur Thatcher, Allan T. Simpkins, G. G. Pollard, W. M. Chauvenet and Ralph Simpkins. Address Mr. Cantwell.

St. Louis — Real Estate.—The Lindenschmidt Real Estate Co., capital stock $35,000, has been incorporated by Charles Lindenschmidt, Josephine Lang, George Lang and others.

NORTH CAROLINA.

Asheville—Drug Factory.—E. W. Grove, president Paris Medicine Co., will establish a bromo-quinine factory in Asheville.

Chatham County—Coal Mines, Coke Ovens, etc.—Samuel P. Langdon, No. 315 Drexel Building, Philadelphia, Pa., has purchased 1575 acres of land in Chatham county for the North Carolina Coal & Coke Co., containing approximately 9,000,000 tons of superior gas and steam coal. A slope has already been opened and machinery placed having a hoisting capacity of 1500 tons per day, and company is preparing to put the machinery in position and to build 100 miners' houses, together will all necessary other improvements, for the production of this tonnage. It is proposed to construct the plant for the manufacture of coke, in addition to the shipping of coal to market.

Columbus—Asbestos Mining.—It is stated that Franch & Stearns have commenced mining developments on asbestos deposits in Polk county, near Columbus.

Darlington—Electric-light Plant.—The Darlington Manufacturing Co. has awarded contract to the Charlotte (N. C.) Electrical Engineering & Supply Co. for furnishing and putting in an electric-light plant.

Durham—Telephone Factory.—C. Egan, of Connecticut, is investigating with a view of establishing a telephone factory in Durham, to be operated in connection with the Interstate Telephone.

Everetts—Lumber Company.—The Everett Lumber Co. has been incorporated, with a capital stock of $25,000, by S. F. Everett, George P. McNaughton, John Fraley and L. B. Wynn, for the purpose of conducting a general lumber business. Address S. F. Everett.

Franklinton—Cotton Mill.—The Sterling Cotton Mills, reported lately as to put in new machinery, has completed an addition to its buildings and will install 4000 new spindles.

Hyde County—Saw Mills and Lumber Lands.—H. Clay Tunis, of Baltimore, Md., has purchased of the Scranton & North Carolina Land & Lumber Co. its saw mill, dry-kilns, railroads and 23,000 acres of timber land in Hyde and Beaufort counties, said to contain 100,000,000 feet of timber. Mr. Tunis expects to manufacture about 25,000,000 feet of lumber per annum. He will take possession August 1.

Marion—Oil Mills.—Bobbitt & Bobbitt will manufacture essential oils, eight gallons daily.

Rockingham—Saw Mill, Compress, etc.—Capt. H. C. Watson and J. B. Watson are

interested in the erection of saw mill, cotton compress, etc.

Rockingham—Cotton Mill.—The Pee Dee Manufacturing Co. has decided just what will constitute the improvements to its mill, recently announced; a building 317x100 feet, two stories high, will be erected and equipped with 6000 spindles, 300 looms and dyehouse, engine and boilers, etc; order for machinery not yet placed.*

Rutherfordton — Gold-milling Mill. — E. Warne, of Rutherfordton, and Captain Johnston, of Washington, N. J., are erecting a roller gold mill.*

Spray—Cotton Mill.—The Nantucket Cotton Mills, reported several months ago as incorporated, is now building its factory; will be partially equipped with machinery at the start; James S. McAlister, treasurer, Worthville, N. C.

Wilson—Hogshead Factory.—S.W.Venable, Jr., & Co. will rebuild their hogshead factory reported as burned; loss on burned building estimated at $2000.

SOUTH CAROLINA.

Charleston—Increase Capital.—The Guendolos Rice Co. has increased its capital stock to $50,000.

Columbia—Water Works, etc.—The city council has of late been discussing proposed improvements to water works and sewer system in order to relieve certain districts of the city that are not properly served. City Engineer Wilson can be addressed for information.

Florence—Telephone Lines.—A company has been organized, as referred to recently, to conduct telephone lines; forty miles is now in operation and the extension of fifty miles more is contemplated; R. C. Commander, president.

McColl—Cotton Mill.—The McColl Manufacturing Co., which decided recently to put in 5000 additional spindles, has completed additional building and will install machinery at once.

Pinopolis — Mining. — Charter commission issued to the Kensington Mining Co., with capital of $1000.

Spartanburg — Electric Plant.—Incorporated: The Spartanburg Gas, Electric Light & Street Railway Co., capital stock $200,000, by Elliott Norton, William E. Lown, George G. Day and Albert Leszynsky, all of New York.

Spartanburg — Telephone System. — The Home Telephone Co. has applied for charter and for privilege to construct system in the city.

Spartanburg—Electric Plant and Water-power Development.—William C. Whitner & Co., of Anderson, S. C., have received a contract, as recently stated, to furnish street lighting for ten years to the city of Spartanburg. For this purpose, and for other purposes, Whitner & Co. will commence soon the erection of an electric plant to supply light, heat and power. It is also proposed to develop the water-power at McMillan's Shoals, where it is estimated 800 or 1000 horse-power can be had, and to transmit it ten miles to Spartanburg.

TENNESSEE.

Chattanooga — Iron Foundry.—The Ross-Mehan Foundry Co. is erecting another new foundry addition to its large plant; new foundry is 50x100 feet.

Chattanooga — Electric-light Plant. — The Chattanooga Light & Power Co. is installing the new machinery recently purchased. The machinery included a 2000-light incandescent machine, 125-horse-power 500-volt power generator, 250-horse-power boiler, etc.

Chattanooga — Handle Factory.—Application has been made for a charter for the American Handle Co., by E. G. Oates, Dan E. Brown, Walter McGee, W. A. Schuler and Thomas McCulloh; company will operate several handle factories already established.

Dayton—Water Works.—The city continues to consider the proposed water-works system for which $50,000 in bonds was authorized. Address "The Mayor."

Embreeville—Iron Furnace.—The Embreeville Iron Co., having made changes and improvements and largely increased the output of its furnace, will resume operations about July 25.

Mount Pleasant—Phosphate Dryers.—J. H. Carpenter & Co., of Ridley, Tenn., will erect only phosphate-drying sheds at Mount Pleasant, and not a plant, as had been stated.

TEXAS.

Abilene—Cotton Compress.—Incorporated: The Abilene Compress Co., capital stock $50,000, for construction and maintenance of a cotton compress, by Fred Cockrell, C. H. Bond and C. C. King. Address C. C. King.

Corsicana—Oil Wells, etc.—Chartered: The Verna Petroleum Oil Co., capital stock $15,000, to contract for the lease and purchase of the right to prospect for, develop and use coal and other materials and petroleum, also the right to erect, build and own all necessary oil tanks, cars and pipes necessary, etc.; incorporators, J. J. Culbertson, of Paris; R. K. Erwin and J. U. Singleton, of Waxahachie, Texas. Address the last named.

Dallas—Mercantile.—Incorporated: Crowdus Bros. & Co., capital stock $5000, for sale of agricultural and farm products, etc.; incorporators, J. C. Crowdus, R. L. Crowdus and E. W. Armentrant. Address J. C. Crowdus.

Denison—Telephone Lines.—It is proposed to construct a line of telephone from Denison to Tishomingo, I. T.; R. M. Harris, of Tishomingo, can probably give names of interested parties.

Houston—Electric-light Plant.—The Citizens' Electric Light Co. will build a new iron and brick fireproof structure to accommodate its new electric-light machinery.

Houston—Street Improvements.—An ordinance has been introduced in the city council providing for the borrowing of $100,000 on bonds of the city for street improvements. Address "The Mayor."

Milford—Cotton Gin, etc.—Incorporated: The Milford Gin & Cotton Co., capital stock $10,000, for ginning, baling and compressing cotton, milling corn and wheat, etc.; incorporators, John R. Griffin, J. M. Coffin and Ed Woodall. Address Mr. Griffin.

Rockland—Saw Mill.—William Cameron, of Waco, reported during the week as having purchased the saw mill of W. H. Aldridge, will put in a new mill with daily capacity of 150,000 feet, making total daily output 225,000.

San Antonio—Market Company.—Incorporated: The Fulton Market Co., capital stock $10,000, for erecting and maintaining a market, etc.; incorporators, J. E. Webb, W. Lemke and James Hennessy. Address Mr. Hennessy.

Sherman.—Chartered: The Empire Company, for the purpose of dealing in agricultural and farm products; capital stock $10,000; incorporators, C. B. Wandelohr, J. A. Price and J. C. Langley.

Taylor—Oil Mill, etc.—Williams Bros. confirm the report of their purchase of the Taylor Cotton Gin & Oil Co.'s plant; they state that they will soon commence to build a new 100-ton cottonseed-oil mill; new eight-stand gin is now being built.

Texas—Copper Mining.—The Boston & Texas Copper Mining Co. is being organized for the purpose of developing 12,000 acres of copper deposits in Texas. Address of company, 11 Broadway, New York, N. Y.

Wellborn—Coal Mining.—The Texas & Pacific Coal Co. has purchased equipment of machinery for opening mines and will sink shaft at once.

VIRGINIA.

Berkley—Wharf, Sheds, etc.—The J. D. Armstrong Co., Norfolk, has purchased river front property at Berkley and will construct a wharf, sheds, etc. This company employs about 100 operatives.

Lynchburg—Machine Shops, Foundry, etc. P. C. Hubbard will rebuild at once his burned plant; plans have been prepared for new structure of brick, 40x100 feet, with wing for smith shop; separate building for patterns, 20x30 feet; will put in some new machinery also; twenty men will be employed.*

Newport News—Dry-dock.—Work will commence at once on the proposed dry-dock of the Newport News Shipbuilding & Dry Dock Co., plans for which C. P. Huntington was reported last week as having accepted. The dock will be 800 feet long, with breadth of 80 feet at bottom and 148 feet at the top; depth will be 41 feet 8 inches from the top of the sill, thus giving 34¼ feet of water at low tide; the keel blocks will extend five feet above the bottom, enabling a vessel drawing 29¼ feet of water to enter the deck; deck will be at entrance 106 feet at top and 85 feet wide at bottom, with granite and concrete casements; gate will be a caisson, provided with engines and pump.

Norfolk—Bridge.—A resolution has been introduced in the city council directing the finance committee to consider at an early date the issuance of bonds for the construction of a steel bridge over Smith creek, for which City Engineer Brooks has prepared plans calling for a bridge to cost $61,000.

Richmond—Paper Mills.—The Richmond Paper Co. intends to rebuild immediately its burned plant; loss $20,000.

Vinton—Flour Mill.—Mason & Cook have purchased the Terry Flour Mill for $6000 and will operate same.

Waynesboro—Saw Mill.—Crowder & Anderson contemplate the erection of a saw mill to cut 10,000 feet daily.*

WEST VIRGINIA.

Charleston—Coal Mining, etc.—The West Virginia Fuel Co. has been chartered for the purpose of mining coal, manufacturing coke, buying and selling merchandise and buying and selling iron and steel; authorized capital $100,000; incorporators are Donald McDonald, of Cincinnati; J. E. Chilton, J. E. Scaggs, W. A. MacCorkle and W. E. Chilton, of Charleston. Address the last named.

Enterprise—Coal Mining, etc.—The Bingamon Coal & Coke Co. (reported last week as incorporated) is now developing the mines of Samuel Hines & Co., near Enterprise, which were purchased recently by incorporators of the Bingamon Company. From thirty-five to forty men are employed at present and more will be engaged at once. Elevators will be installed, and revolving screens, etc.; engine and elevators have not yet been bought.*

Fairmont—Coal and Coke Company.—The Bingamon Coal & Coke Co. has been incorporated, with a capital stock of $100,000, by F. W. McIntire, Seymour McIntire, Elias McIntire, of Worthington; James Lawlis, of Enterprise, and John A. Clark, of Fairmont. Address the last named.

Fairmont—Telephone Lines.—The Rivesville & Montana Telephone Co. has been chartered to construct and operate a telephone from Fairmont to Rivesville. The authorized capital is $50,000. The incorporators are C. E. Gaskill, J. C. Gaskill, F. B. Clayton, J. P. Coogle, of Fairmont; J. D. Arnett, F. F. Pickett, A. S. Prichard, T. S. Cox and J. G. Floyd, of Morgantown. Address C. E. Gaskill.

Oaks—Colliery.—The White Oak Colliery Co. has been chartered with capital stock of $100,000; incorporators, Lucy G. Collins, Justine Collins, of Charleston; Thomas Z. Lewis, G. P. Daniels, of Glen Jean, and I. T. Mann, of Bluefield. Address last named.

Spencer—Woodworking Factory.—J. W. L. Kyer is now rebuilding his furniture and building-material factory which was burned recently.

BURNED.

Asia, Texas.—Planing mill of the Sam Allen Lumber Co., of Houston, Texas.

Coalburg, Ala.—W. J. McCarthy's saw mill.

Crowley, La.—Pumping plant of Edgar Guidry, near Crowley; loss $2500.

Gibson, N. C.—Knitting mill of J. A. McIlwinen.

Grenada, Miss.—The Grenada Ice Factory; George M. Brown, manager.

Grenada, Miss.—The Ice factory just completed by George M. Brown, of Louisiana.

Hancock, Md.—The Hancock Handle Factory, operated by J. A. Rebert and W. T. Busey; estimated loss $1200.

Louisville, Ky.—James S. Clarke, Jr., & Co.'s electric works; estimated loss $40,000.

Nacogdoches, Texas.—Dry-kilns of Royal Lumber Co.

Phoenix, Md.—Mount Vernon Co.'s cotton mill, damaged to extent of $20,000 on machinery and goods by flood; company's main office, Baltimore.

Richmond, Va.—The Richmond Paper Mills; estimated loss $30,000.

Temple, Texas.—Planing mill of Ray & Walraven; loss $3000.

Vanndale—Stave factory of J. Applewhite & Co., of Memphis, Tenn.; loss $4000.

Warren, Md.—Woodward, Baldwin & Co.'s cotton mill damaged by flood; main office in Baltimore.

Whitecastle, La.—Sugar-house on Cora Plantation. Address Mr. Elseman, agent, Cora Plantation.

Whiteoak, Tenn.—Flour mill of Marion Mowery.

Williamsport, Md.—Conococheague Brick Co.'s works, damaged by fire to extent of several thousand dollars.

Wilson, N. C.—The hogshead factory of S. W. Venable, Jr., & Co.; estimated loss $2000.

Windsor, Fla.—The tub and bucket factory of Joseph Addler, in South Windsor; estimated loss $20,000.

Emery-wheel Price-list.—A most neat and concise price-list of emery wheels has been issued by the Sterling Emery Wheel Manufacturing Co., of Tiffin, O. If interested send for copy.

BUILDING NOTES.

Alexandria, La.—School.—St. James's Episcopal Church will erect a $1500 frame school building. Address Rev. H. C. Duncan.

Appomattox, Va.—Hotel.—T. A. Smith will build a hotel; T. A. Walton will erect a dwelling.

Ashland, Ky.—Mercantile Building.—W. C. Diederich will erect a mercantile building.

Athens, Tenn.—Hotel.—W. M. Carson will erect a hotel.

Augusta, Ga.—Mercantile Building.—MacMurphy & Storey have prepared plans for enlargement of D'Antignac Building.

Baltimore, Md.—Dwellings.—Annie Walsh will erect four two-story brick dwellings; John S. Deicher will erect six two-story brick dwellings to cost $400 each.

Baltimore, Md. — Truckhouse. — The art commission has accepted plans by William M. Ellicott, Jr., for the proposed $25,000 truckhouse; work of construction will be commenced at once.

Baltimore, Md.—Dwellings.—Permit issued to W. W. Baker, Sr., for erection of forty-eight two-story dwellings, and to C. B. Burdette for twenty-eight two-story dwellings, to cost $1000 each.

Baltimore, Md.—Buildings.—Permits have been granted to Miss Alice Gilman for the erection of a four-story brick back building, estimated cost $6500; to St. Mary's Seminary to erect a three-story brick dwelling 38x43 feet, cost $7000.

Baltimore, Md.—Buildings.—John Hughes, Jr., has been awarded contract for the improvements to No. 18 Public Grammar School; improvements consist of the completion of the third story and of two assembly-rooms 58x21 feet, to cost $3000. Albert Likes has had plans prepared for the erection of a warehouse to cost $10,000.

Baltimore, Md.—Buildings.—Permits have been granted to Charles T. Cockey to erect a four-story brick building 10x18 feet; to J. H. Lautenbach to erect a three-story brick saloon and hall 25x100 feet, to cost $6500.

Baltimore, Md.—Warehouse.—Plans have been completed by Jackson C. Gott for the new warehouse, engine and boiler-room of the Crown Cork & Seal Co.; the warehouse will be six stories high, 81x90 feet, and will include large workshops and warerooms; the engine and boiler-house will have a front of Seneca stone and granite, and will be 100x90 feet; these buildings will be two-and-one-half stories and will include engine, dynamo, boiler and tool rooms; buildings to cost $50,000.

Baltimore, Md.—Office Building.—The Massachusetts Building Co. has about completed all arrangements to insure the erection of its office building, to which reference has been made several times in this department during the past year. Horace Slingluff, of 23 Hopkins Place, Baltimore, who is one of those interested in the enterprise, has stated that contract for the building's construction has been awarded to the George A. Fuller Co., of New York, Boston and Chicago. The structure will be twelve stories high, 60x90 feet in dimension, containing two large banking rooms, 100 offices, light granite, buff-brick and terra-cotta trimmings, elevators, electric-light fixtures, lavatories, dining-room, roof cafe, and cost will be over $500,000. Plans and specifications are by Winslow & Weatherill, of Boston, who will be represented during construction by Douglas H. Thomas, Jr., of Baltimore.

Brunswick, Ga.—Buildings.—It is intimated that L. R. Aiken, of Mount Pleasant, Ga., will erect a number of buildings in Brunswick.

Cartersville, Ga.—Store.—Dr. J. H. Spier will build a brick store; T. R. Jones will also erect a building.

Cedartown — Warehouse and Cottages.—The Cedartown Company will build a warehouse for cotton, to have five compartments 60x120 feet, making the building 120x300 feet; same company will build ten cottages for the cotton-factory operatives.

Charleston, S. C.—Masonic Temple.—Wilson & Edwards are preparing plans for the erection of a three-story Masonic temple building; contract will be let as soon as plans are ready.

Charlotte, N. C.—Church.—Bids will be received until July 26 for the erection of the proposed new Trinity M. E. Church building; Hayden & Wheeler, architects, Atlanta, Ga., prepared the plans.

Charlotte, N. C.—Church.—C. C. Hook is preparing plans for frame church building for Ebenezer A. R. P. Church; building to be of frame and cost $2000. Address Rev. G. R. White.

Chatham County, N. C.—Dwellings.—One

hundred miners' houses will be erected for the North Carolina Coal & Coke Co. Address Samuel P. Langdon, No. 315 Drexel Building, Philadelphia, Pa.

Crockett, Texas—Building.—William M. Patton, Tadmore, Texas, will award contract on July 18 for the erection of a two-story brick building, to be 32x85 feet, ten rooms; contractors to furnish all materials.

Dahlonega, Ga. — School. — Hayden & Wheeler, of Atlanta, have the plans ready for the proposed school building to be erected in Dahlonega; bids will be received until July 30.

Elizabeth City, N. C.—Mr. Blades will erect a large building.

El Paso, Texas—Residence.—J. F. McAfee to erect brick residence to cost $2100.

Gaffney, S. C. — Church. — Hayden & Wheeler, of Atlanta, Ga., have prepared plans for the proposed Second M. E. Church building to be built in Gaffney.

Greenwood, S. C.—Stores, etc.—D. J. Anderson, of Anderson, S. C., has prepared plans for seven two-story brick storerooms, granite and plate-glass fronts.

Huntsville, Ala.—To Improve Jail.—The court of Madison county commissioners has decided to give up all plans for the building of a new jail and make extensive improvements on the old jail instead. The brick front of the old jail will be torn away and a modern front erected at a cost of $15,000. When complete the jail will be composed of thirty-six iron and steel cells, each with a capacity of six prisoners. The new front will be three stories in height. No contracts will be let for the work.

Jackson, Miss.—School.—Bids will be received until August 2 for the erection of $1500 two-story brick addition to school; Walter G. Kirkpatrick, city engineer.

Kansas City, Mo.—Office Building.—Dr. John Bryant, Jr., of Independence, Mo., contemplates the erection of an office building in Kansas City.

Keyser, W. Va.—Jail.—Mineral county commissioners do contemplate the erection of a jail, as has been reported; plans and details have not been decided upon as yet, but it is desired to erect a structure that will accommodate twenty to twenty-five prisoners, with residence for jailor and one large room for jury uses; building to have steam heat, also sanitary and ventilating arrangements; suggestions from architects are invited. Address J. V. Bell, county clerk.

Leesburg, Va.—Residence.—Norris Bros. have received contract for the erection of a residence for Judge J. B. McCabe.

Livingston, Ga.—Residence.—E. Matthews will build a six-room residence near Livingston; R. W. Smith has contract.

Louisville, Ky.—Church.—Fourth Avenue Methodist Church will erect a structure to cost from $100,000 to $125,000; proposals are now being asked. Address "The Pastor."

Louisville, Ky.—School.—Clark & Loomis have prepared plans for school and dormitory for Industrial School of Reform to cost $12,500; also plans for $7500 for remodelling of residence of George M. Davis.

Louisville, Ky.—Dwellings.—Ed H. Meyer to erect $2000 frame residence; J. H. Caperton, agent, to erect three three-story brick stores and flats to cost $9000.

Marietta, Ga.—Chapel.—Contract for erection of proposed Presbyterian church chapel let to C. E. Henderson at $4000.

Marietta, Ga.—Church.—Hayden & Wheeler, of Atlanta, have prepared plans for the proposed new M. E. church building; plans will be ready for bids about July 25.

Marietta, Ga.—Church.—Hayden & Wheeler, of Atlanta, Ga., have prepared plans for a new church for the Methodist congregation. Address "The Pastor."

Mount Pleasant, Tenn.—Dwellings.—Harry Harlan is erecting a dwelling; Rev. Strayhorn will build a dwelling; George W. Killebrew will erect a brick residence.

Newberry, S. C.—School Building.—The trustees of Hartford Academy will receive bids until August 1 for the erection of a new schoolhouse; plans and specifications made known at that time; E. Lee Hayes, clerk of board.

New Orleans, La.—Office Building.—The Southern Express Co. does not contemplate the erection of an office building at an early date, as had been stated.

Newport News, Va.—Hotel.—William D. Hill, architect, No. 135 25th street, will receive sealed proposals until July 25 for the erection of a three-story brick hotel; plans may be seen at the office of the architect or at the public house of Hoffman Bros.; usual rights reserved.

Norfolk, Va.—Schools.—Twenty thousand dollars have been appropriated for the erection of three school buildings, contracts for which have been let to Peebles & Sharp and J. E. R. Carpenter.

Roanoke, Va.—Hotel.—S. K. Campbell, manager Hotel Roanoke, states that he will rebuild at once the hotel lately reported as burned.

San Antonio, Texas—Buildings.—Permit has been granted B. F. Yoakum for the erection of a brick building, 40x50 feet, of pressed brick front, with large plate-glass windows; T. E. George will erect a two-story brick building 50x150 feet.

Shelbyville, Ky.—Residence.—L. T. Gruber & Sons, of Shelbyville, have contract to erect a two-story frame residence for Sam Brown, of Mulberry.

Staunton, Va.—Hotel.—It is reported that the Virginia Hotel will be improved and enlarged.

Virginia Beach, Va.—Hotel.—Mrs. M. L. Allen has let contract for the erection of a 30-room hotel, to have electric lights, hot and cold water, sanitary plumbing, and a windmill to supply water. Parties desiring to furnish material can address J. Q. Dickinson, Norfolk, Va.*

Washington, D. C.—Dwellings.—W. T. Davidson, No. 615 Fourteenth street N. W., is arranging to build six dwellings on California Heights and will want bids on labor and materials.*

Washingon, D. C.—Dwellings, etc.—W. J. Marsh has prepared plans for a modern business house for F. B. McGuire; structure to be three stories high, mottled brick and terra-cotta front, 36x64 feet, store fronts, etc. W. B. Wood will build two-story house. George Schweir will build two-story 32x65-foot frame cottage. Charles W. Handy will erect three-story house, press-brick front. W. T. Davidson will erect eight houses, two stories high, press-brick fronts. D. B. Groff will erect three buildings for store and dwellings. S. D. Jackson will erect two frame houses, two stories, 16x30 feet. J. Harrison will erect three-story 52x66-foot house for offices and laboratory; steam heat.

Washington, D. C.—Apartment-house.—The Farragut Apartment House Co., Walter B. R. Berry, president, will build an apartment-house ninety feet high.

Washington, Ga.—Hotel.—W. T. Johnson awarded contract for erection of his proposed hotel to L. L. Stephenson, of Elberton, Ga.

Washington, Ga.—Hotel.—Bids will be opened shortly for the erection of the Fitzgerald Hotel on public square; probably W. T. Johnson can inform as to interested parties.

Winchester, Ky.—Dwelling.—J. A. Nash will build a dwelling-house; plans prepared.

RAILROAD CONSTRUCTION

Railways.

Atlanta, Ga.—Mr. John M. Egan, one of the directors of the Atlanta Belt Railway Co., informs the Manufacturers' Record that probably no work will be done on this line before October 1. No definite arrangements have been made as yet for its completion.

Caldwell, W. Va.—It is reported that a Northern syndicate which proposes building a railroad from Caldwell to Travelers' Repose, in Pocahontas county, has had the line surveyed and will soon build it. Among those interested are J. N. Beckley, E. M. Upton, of Rochester, N. Y.; John T. McGraw, of Grafton, W. Va., and C. M. Warner, of Syracuse, N. Y.

Columbus, Miss.—It is stated that most of the right of way has been secured for the Columbus, Fulton & Northern Railroad, projected from Columbus, Miss., to Lexington, Tenn., a distance of 175 miles. Newman Cayce, of Columbus, is president of the company.

Culpeper, Va.—The Piedmont Railway Co., which is promoting the proposed line from Culpeper and Rappahannock counties, has elected P. H. O'Bannon, of Rappahannock, president.

Edenton, N. C.—It is stated that sixteen miles have been built of the Wellington & Powellsville Railroad, being constructed between Windsor and Ahoskie, N. C., a distance of twenty-one miles. It is expected to have the new line in operation by September 1. J. W. Branning is president of the company at Edenton.

El Paso, Texas.—It is stated nearly ninety miles of track have been laid on the El Paso & Northeastern Railroad, which is being built by the New Mexico Coal & Railroad Co. to the White Oaks coal fields in New Mexico.

Hamburg, Ark.—It is reported that about six miles of track have been laid on the Mississippi River, Hamburg & Western Railroad, which is to be built from a point on the Mississippi through Eastern Arkansas, a distance of forty miles. J. M. Parker is president of the company.

Horatio, Ark.—D. C. Richardson, of the Little River Railroad, informs the Manufacturers' Record that all contracts have been made for this line and material secured.

Lake Providence, La.—Joseph Ransdell, one of the promoters of the Lake Providence Railroad Co., informs the Manufacturers' Record that a charter has been secured for this line, and that it is hoped to begin work upon it soon. The charter provides for a railroad from Lake Providence to Shreveport, La., intersecting several railroad lines now under construction. The capital stock of the company is placed at $10,000,000. E. J. Hamley is secretary.

Mobile, Ala.—It is reported that the Mobile & Ohio has completed its branch to the Blocton coal fields, a distance of thirteen miles, and to the Warrior river fields, a distance of nine miles. Both of these branches extend to the division recently built between Montgomery and Tuscaloosa. J. G. Mann, at Mobile, is chief engineer.

Nashville, Tenn.—It is again reported that work is about to be resumed on the Tennessee Central Railway. Jere Baxter, president of the company, states that bids are to be received at once for constructing the section of this line between Monterey and Knoxville, Tenn. About fifteen miles remain to be graded.

Pacific, Mo.—It is reported that the Missouri Pacific Railroad Co. has decided to construct a branch from Pacific to the town of Labadie, a distance of ten miles; surveys are now being made. W. B. Doddridge is general manager of the company at St. Louis.

Petersburg, Va.—It is stated that business men of Wilson, N. C., are desirous of having the Richmond, Petersburg & Carolina Railway, now under construction between Petersburg and Ridgeway, N. C., extended to Wilson. DeWitt Smith, 50 Broadway, New York, is president of the company.

Radford, Va.—The Norfolk & Western Railroad Co. is surveying a proposed new route on its line near Radford, which will be about five miles in length. Henry Fink, at Roanoke, Va., is president of the company.

San Antonio, Texas.—Surveys have been built for the line of the San Antonio, Llano & Northern Railroad from Strawn to Llano, a distance of 140 miles. The road is being promoted between San Antonio, Llano and the coal fields in the vicinity of Strawn and Thurber, Texas. The total length will be 330 miles. Charles W. Angle, at Llano, Texas, is general manager of the promoting company.

Shelby, Miss.—The plan to build a railroad nine miles long, from Shelby to Shelbina, Miss., has been taken up by H. Irving Wheatcroft, who has been interested with the Colorado Valley Railroad in Texas. It is stated that the line will be built if the people of Shelby will take $25,000 in stock and give the right of way and terminals. Mr. Wheatcroft's last address was Sweetwater, Texas.

Texarkana, Ark.—It is stated that about five miles of the Texarkana & Shreveport Railroad have been built on the extension into Louisiana. B. Collins is general manager of the company at Texarkana.

Wister, I. T.—It is reported that the Choctow, Oklahoma & Gulf Railroad Co. is preparing to build an extension of its line to Little Rock, Ark., the present terminus, a distance of 130 miles. Francis I. Gowen, at Philadelphia, Pa., is president of the company.

Yoakum, Texas.—The business men of Yoakum have adopted resolutions for the proposed Guadalupe Valley Railroad, which is being promoted by Uriah Lott, J. P. Nelson and others.

Street Railways.

Kansas City, Miss.—The Metropolitan Street Railway Co. has let a contract for the construction of the trolley system on Broadway and other streets in the city. W. H. Holmes is general manager of the company.

Petersburg, Va.—D. L. Troy, president of the Piedmont Traction Co., informs the Manufacturers' Record that no definite arrangements have been made as yet for constructing the electric railway system. The company has applied for privileges of the city authorities. Mr. Troy may be addressed at Charlottesville.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Compressors. — See "Water-works Equipment, etc."

Air Compressors, etc.—Cleveland County Manufactory, Lattimore, N. C., wants to correspond with manufacturers of hydraulic cylinders, air compressors, etc.

Bicycles.—C. A. Bradley, Monticello, Fla., wants to correspond with makers of bicycles and bicycle repair tools.

Boiler and Engine.—See "Hoisting Equipment."

Boiler and Engine.—See "Cotton Mill."

Boilers.—See "Water-works Equipment."

Brick Contractors.—Sealed bids will be received up to July 23 for construction of four down-draft kilns, which will require about 1,200,000 brick; all material will be furnished on the ground; certified check for 10 per cent. required; plans and specifications on file at general office in Fort Worth, or branch office No. 257 Main street, Dallas. Address Green & Hunter Brick Co.

Brick Machinery.—Union Industrial Academy, J. H. A. Cyrus, president, Port Royal, Va., will want soon a brick-making machine.

Building Material.—W. T. Davidson, No. 615 Fourteenth street N. W., Washington, D. C., will probably want bids on labor and material for construction of six dwellings.

Building Material.—J. Q. Dickinson, Norfolk, Va., will want bids on electric light, hot and cold water, sanitary plumbing and windmill for hotel.

Building Materials.—Pee Dee Manufacturing Co., Rockingham, N. C., wants ribbed glass 13x20 inches.

Cotton Cloth, etc.—Mrs. E. J. Hartwell, general manager Woman's Self Help Shirt Factory, Roanoke, Va., wants to buy material suitable for overalls, working shirts, etc.

Cotton Mill.—Pee Dee Manufacturing Co., Rockingham, N. C., will contract for 6000 spindles, 300 looms and dyehouse equipment; also engine and boilers.

Cotton Mill.—Frank Dewar, Gainesville, Ga., wants full information regarding the manufacture of cotton yarns, estimates on cost of machinery, etc.

Electric-light Machinery.—Southern Trading Co., Bingham, Tenn., wants addresses of makers of dynamos and other electrical machinery and supplies.

Elevator.—Melville Furniture Co., Mebane, N. C., wants to place order for elevator.

Elevators.—See "Mining Machinery."

Elevators.—See "Hoisting Equipment."

Engine.—See "Mining Machinery."

Filters.—See "Water-works Equipment."

Furniture.—W. Gelsenheimer, Camden, S. C., solicits correspondence with manufacturers of furniture and household goods.

Heating Apparatus.—See "Building Material."

Heating Apparatus.—Melville Furniture Co., Mebane, N. C., wants to place order for heating apparatus for factory.

Hoisting Equipment.—Harry W. Hoffman, contractor and builder, High Bridge, N. J., is in the market for both or either five-ton guy and stiff-leg derricks for double-drum hoisting engine and for 20-horse-power upright boiler; also elevator for hod-carriers.

Hydraulic Cylinders.—See "Air Compressors."

Ice Machinery.—J. B. P. Milner, Barnesville, Ga., is figuring on a five to ten-ton ice factory.

Iron Work.—E. H. Bouton, Roland Park, Md., wants catalogues, illustrations and prices on ornamental cast-iron urns for flowers.

Machine Tools.—See "Rolls."

Machine Tools.—See "Bicycles."

Machine Tools.—P. C. Hubbard, Lynchburg, Va., will need a 16"x18' engine lathe and a 16" crank shaper.

Mining Machinery.—Bingamon Coal & Coke Co., Enterprise, W. Va., will want engine and elevators to run screens in coal mine.

Mining and Milling Machinery.—See "Rolls."

Oil-mill Machinery.—Globe Refining Co., Louis K. Ferguson, president, Louisville, Ky., is taking bids on machinery for complete cottonseed-oil refining mill, also for soap machinery.

Paper Boxes, etc.—Southern Trading Co., Bingham, Tenn., wants addresses of manufacturers of paper boxes, envelopes, mailing tubes, etc.

Plumbers' Tools, etc.—C. A. Bradley, Monticello, Fla., wants to correspond with makers of plumbers' tools and supplies.

Porcelain.—D. B. Henry, Box 302, Crowley, La., wants addresses of manufacturers of porcelain.

Printing Machinery.—Southern Trading Co., Bingham, Tenn., wants addresses of makers of printing machinery.

Pump.—Melville Furniture Co., Mebane, N. C., wants to place order for water tank and pump.

Pump.—Proposals and specifications will be received by the water board of Martinsburg, W. Va., with a view to purchasing, for the furnishing and erecting complete (except foundations), of a compound condensing duplex pump of 2,500,000 gallons capacity per day; specifications and drawings must accompany each bid. The right to reject any or all bids is reserved.

Pumping Machinery.—See "Water-works Equipment, etc."

Pumping Machinery and Motor.—Bids are invited for one outside packed plunger pump of 4,000,000 gallons capacity, and motor for same. Full particulars can be obtained by addressing H. C. Patterson, superintendent water works, Austin, Texas.

Pumping Plants.—Sealed bids will be opened September 3 for extensive additions to the pumping plants of East Boston and Charlestown, Boston, Mass.; proposals will be wanted for an engine or set of engines and two horizontal tubular boilers; for plans, blank forms, specifications and other information necessary to bidders address "Board of Metropolitan Sewerage Commissioners of Massachusetts," William M. Brown, Jr., superintendent, No. 1 Mount Vernon street, Boston, Mass.

Railway Equipment.—Cane Belt Railroad Co., W. T. Eldridge, vice-president and general manager, Eagle Lake, Texas, is in the market for six miles of first-class 40-pound steel rails, spikes, bolts and angle bars to equip same; also, four single-throw switches and one passenger coach.

Railway Equipment.—Watts Steel & Iron Syndicate, Limited, Middlesborough, Ky., C. P. Perin, manager, wants quotations on 1000 tons of scrap steel rails, etc., f. o. b. Middlesborough.

Rolls.—E. Warne, Rutherfordton, N. C., Box 128, wants to buy a set of second rolls, all-iron frame, steel springs, driven with pulleys, and shoes or shells to rolls.

Roofing.—J. B. Kelly, Sanford, N. C., wants to buy roofing.

Rubber Goods.—Southern Trading Co., Bingham, Tenn., wants addresses of makers of rubber bands.

Saw Mill.—Crowder & Anderson, Waynesboro, Va., want to buy saw mill of 10,000 feet capacity daily; second-hand equipment will answer.

Scrap Iron.—See "Railway Equipment."

Soap Machinery.—Globe Refining Co., Louis K. Ferguson, president, Louisville, Ky., is taking bids on complete outfit of machinery for soap factory; also for oil-refining plant. (See "Oil-mill Machinery.")

Steel Tape.—Chatham Manufacturing Co., Elkin, N. C., wants to buy steel tape in lengths of 50 to 100 feet, strong enough to hold 100 pounds.

Tank and Pump.—See "Pump."

Tanks.—See "Water-works Equipment."

Telephone Equipment.—Complete equipment will be wanted for 75-instrument line and 100-drop switchboard. Address T. R. Lampton, Magnolia, Miss.

Water-works Equipment.—The George Foundry and Machine Works, Rome, Ga., wants to obtain information regarding filters for small water-works system.

Water-works Equipment, etc.—J. D. Mitchell, chairman water-works committee, Bristol, Tenn., will want deep-well and duplex pumps, steel tanks, boilers, air compressors, tanks, one to hold 20,000 and one to hold 500,000 gallons; will want deep-well pump of 250,000 gallons per twenty-four hours or air compressor accordingly.

Well-drilling Machinery.—W. F. L. Steele, Rockingham, N. C., wants to buy well-drilling machinery.

Windmill.—See "Building Material."

Woodworking Machinery.—J. G. Smith, Barnesville, Ga., will purchase a power rip saw.

Woodworking Machinery.—R. P. Scobee & Son, Winchester, Ky., are in the market for full line of planing-mill machinery.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Maryland Bankers' Convention.

The annual convention of the Maryland Bankers' Association, to be held at Ocean City, Md., during the present week, will consider a number of subjects on which papers have been prepared. They include the following: "Practical Thoughts on Banking," "Trust Companies, Their Relation to National Banks," "Pioneer Banking on the Eastern Shore," and "National Legislation on Banking and Currency Lines;" also "Competition Among Banks, "The Indianapolis Movement and Review of Currency Reform Legislation." The last subject will be discussed by John M. Nelson, of Baltimore; President John Gill, of the Mercantile Trust & Deposit Co., will treat the question of trust companies, while Theodore F. Wilcox will discuss "Competition Among Banks."

A Prosperous Company.

The Maryland Trust Co. of Baltimore has declared its first dividend. The amount is 2½ per cent., or at the rate of 5 per cent. a year. Already the company has accumulated a surplus of $575,000, and it is understood to be the intention of the management to add to this every year until this fund reaches at least $1,000,000, its present working capital.

The officers of the Maryland Trust Co. are Col. J. Willcox Brown, president; Lloyd L. Jackson, vice-president; Henry Bowdoin, second vice-president, and J. Bernard Scott, secretary and treasurer.

New Corporations.

The secretary of state has granted a charter to the Citizens' Banking & Trust Co of Williamson county, Tennessee.

The People's Building & Loan Association, recently formed at Columbia, S. C., has been authorized to do business with $200,000 capital.

The Augusta Financial and Realty Association has been formed at Augusta, Ga., with $15,000 capital. Patrick Walsh is president; F. L. Graham, vice-president, and H. H. Alexander, secretary and treasurer.

New Securities.

Prince George's county, Maryland, has sold its issue of $8000 in school bonds to Fisher & Shaw, of Baltimore, at 108⅞.

The Central Railroad Supply Co., of Nashville, Ky., has issued $15,000 in bonds, which, it is stated, will be floated to increase its working capital.

The East Carolina Railway Co., of Edenton, N. C., has decided to issue $20,000 in 6 per cent. bonds, to be secured by a first mortgage on the company's property. H. Clark Bridgers is president of the company.

It is announced that the Virginia-Carolina Chemical Co. has determined to increase its capital stock from $6,000,000 to $12,000,000. The company has its offices in Richmond, and manufactures fertilizers and chemicals.

The bond issue to be sold by the city of St. Louis, Miss., amounts to $593,000, and will bear interest at the rate of 3½ per cent. Bids for the issue will be received at the mayor's office, St. Louis, until July 27 at noon. All proposals to purchase must be accompanied by a check or cash to the amount of 5 per cent. of the bonds which the purchaser may desire. Isaac H. Sturgeon is comptroller.

Dividends and Interest.

The Louisville Gas Co. has declared a semi-annual dividend of 2 per cent.

The Queen City Bank of Gadsden, Ala., has declared a dividend of 3 per cent.

The Baltimore Automatic Fire Alarm Co. has declared a dividend of 1½ per cent.

The Bank of Portsmouth, Va., has declared a semi-annual dividend of 4 per cent.

The People's Bank of Portsmouth, Va., has declared a semi-annual dividend of 3 per cent.

The Portsmouth (Va.) Insurance Co. has declared a semi-annual dividend of 6 per cent.

The Bank of Commerce of Norfolk, Va., has declared a semi-annual dividend of 3 per cent.

The Security Loan Association of New Orleans has declared a semi-annual dividend of 4 per cent.

The Cottrell Loan Co., of Newport News, Va., has declared a semi-annual dividend of 3 per cent.

The Efird Manufacturing Co. (cotton), of Albemarle, N. C., has declared a semi-annual dividend of 6 per cent.

The American Loan & Savings Co., of Newport News, Va., has declared a semi-annual dividend of 3 per cent.

The stockholders of the Odell Cotton Mills, of Concord, N. C., have declared a semi-annual dividend of 4 per cent.

The Planters' Bank of Farmville, Va., has declared a dividend of 4 per cent. from net earnings. In addition to this it placed $4000 to its surplus account.

The Kentucky Banking Association will have its next annual meeting at Louisville on October 12 and 13. The association will send five delegates to the annual meeting of the American Banking Association, to be held in Denver, Col., next month.

TRADE NOTES.

The town of Poplarville, Miss., is offering for sale $2500 worth of municipal bonds. Bids will be opened August 15. Address R. H. Reeves, town clerk, for information.

Ball Engines.—Orders for the Ball engine continue to flow in to the maker, the Ball Engine Co., of Erie, Pa. Several orders have been received from Mexico and for a tandem-compound engine for an Adrian (Mich.) plant.

The "Wells" Light in War.—Since war operations have begun the Wells Light Manufacturing Co., 44 and 46 Washington street, New York, has been busy making shipments of its lights to various places to meet the needs for brilliant and efficient illumination at fortifications, for coast-line defence, etc., which they completely fill; also, this company has made a large consignment of lights to Cuba, as the "Wells" light has proven itself to be one of the very necessary outfits of war.

Feed-water Heaters.—A large number of "National" feed-water heaters have been shipped lately by the National Pipe Bending Co., of New Haven, Conn. Shipments made during the past two months included 200 horse-power to Bridgeport, Conn., forty to Philadelphia, 125 to Durango, Mexico, 150 to Bellows Falls, Vt., 100 to Washington, D. C., 400 to Camden, N. J., 300 to Milwaukee, Wis., fifty to Columbia, Pa., eighty to Washington, Pa., 150 to Wilson, N. C., 300 to Providence, R. I., and 200 to Baltimore. Power plants of all kinds are represented in the list quoted.

Direct Dyeing Colors.—Some time ago the Manufacturers' Record called attention to a new line of direct dyeing colors for cotton, which were then in the course of manufacture, and said to be fast to fulling under the most severe tests. These colors are on the market and for sale by Messrs. A. Klipstein & Co., 122 Pearl street, New York city. The method of dyeing this new line of colors is very simple and can be dyed without changing any of the present dyeing machinery. These colors also possess the necessary fastness to light, as well as standing the most severe milling without staining the white.

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Manufacturers' Building.—One of the largest and best-equipped power buildings in the United States is the Manufacturers' Building, Providence, R. I. This building has accommodations for upwards of sixty manufacturing concerns, being particularly equipped with conveniences for the production of jewelry, specialties, etc. In this building will be installed a 250-kilowatt 500-volt Westinghouse Electric & Manufacturing Co.'s engine-type generator, 100 r. p. m., to be driven by an Armington & Sims Corliss engine. This generator will supply power for the operation of motors in the various manufacturing departments.

Value of Steam Towing Machines.—In our issue of July 15 we referred to the elaborate towing arrangement which was made for towing the monitor Monterey from Honolulu to Manila, and to the great advantage the Shaw & Spiegle towing machine would have been over the arrangement devised. The arrangement for towing the Monterey would not ease away on the hawser when a breaking strain came upon it, neither could the monitor be pulled up closer to the steamer or let off when required. The great advantage of the steam towing machine is shown by the increasing sales all over the country. The American Ship Windlass Co., of Providence, R. I., commenced their manufacture five years ago, and since that time has sold sixty of these towing machines, ten of which were sold during the past three weeks. This shows that the machine is rapidly coming into general use, its advantages being such that all people who are in favor of a modern and economical method of towing are gradually adopting it.

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Cheap Lands in East Texas.

East Texas lands are attracting the attention of the homeseeker. The low price of land, in connection with the certainty of crops, makes this a most desirable location for the farmer. Most of the counties penetrated by the International & Great Northern Railroad between Longview, Galveston and Columbia, through local organizations, are making flattering offers to settlers. Inquiries addressed to me regarding any particular location will be placed in the hands of responsible parties for reply. D. J. Price, A. G. P. A., I. & G. N. R. R., Palestine, Texas. †

Chautauqua—Low-Rate Excursion via Pennsylvania Railroad.

On July 29 the Pennsylvania Railroad Co. will run another special excursion from Baltimore to Chautauqua, N. Y. Special train will start from Harrisburg at 11.35 A. M. Connecting trains will leave Baltimore 8.50 A. M., arriving Chautauqua about 10.30 P. M. Round-trip tickets, good to return on regular trains not earlier than August 8 nor later than August 31, will be sold at rate of $10 from Baltimore. For specific rates and time of connecting trains apply to nearest ticket agent, or B. Courlaender, Jr., passenger agent, Baltimore and Calvert streets, Baltimore, Md. †

Southern Investments.

Stocks, Bonds and Industrials.

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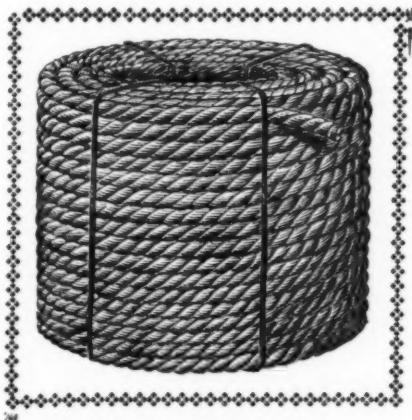

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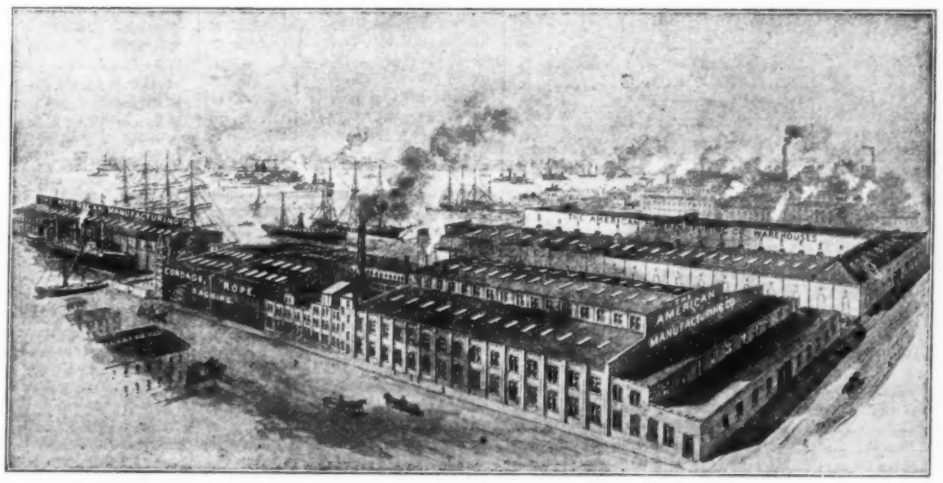

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Southeastern Lime & Cement Co. 6
Southern Expanded Metal Co. 23
Southern Fdry & Mch. Works 18
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Standard Paint Co. 23
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Standard Scale & Supply Co. Ltd. 19
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Stevens', H., Sons Co. 24
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Ads. marked thus * appear every other week.

Ads. marked thus † appear in first issue of each month.

Ads. marked thus ‡ appear in second issue of each month.

Ads. marked thus ‡ not in this issue.

PROPOSALS.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., une 13 1898.—Sealed proposals will be received at this office until 2 o'clock P. M. on the 9th day of July, 1898, and then opened, for the construction, (except heating apparatus) of the U. S. Post Office building at Pottsville, Pa., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Postmaster at Pottsville, Pa. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., July 6th, 1898.—Sealed proposals will be received at this office until 2 o'clock P. M. on the 30th day of July, 1898, and then opened, for all the labor and materials required for (1) mason, fireproofing and cut stone work; (2) carpenter work, painting and finishing, plastering and metal lathing, roofing, metal work; (3) structural iron work, required in the construction of the main buildings at the U. S. Immigrant Station, Ellis Island, New York Harbor. Proposals will be considered for the whole work or for any one of the above three divisions, all to be in accordance with the drawings and specifications, copies of which may be had at this office or at the office of Boring & Tilton Architects, 32 Broadway, New York City. JAMES KNOX TAYLOR, Supervising Architect.

Municipal Bonds for Sale.

Bids for purchase of $2500 worth of Municipal Bonds of the corporation of the town of Poplarville, Pearl River County, Mississippi, will be received by the undersigned until August 15th, 1898. Said bonds will be made payable in ten years, or after five years at the option of the Board of Mayor and Aldermen and to bear 6 per cent. per annum. R. H. REEVES, Town Clerk.

SEWERAGE OF SAVANNAH, GEORGIA.

Sealed proposals for constructing a complete system of House Drainage in the City of Savannah, Georgia, will be received by the Committee on Drainage, until 12 o'clock, noon, Eastern time, September 1st, 1898. The right to reject any or all bids is reserved.

The work will consist approximately of one mile of brick sewer and forty-nine miles of pipe sewer, with appurtenances.

Complete plans and specifications can be seen at the office of the City Engineer, Savannah, Georgia. Address

COMMITTEE ON DRAINAGE,
Care Clerk of Council,
Savannah, Ga.

CHARLESTON, S. C.

Is showing great Commercial Development.

For Sale—Good Dividend-Paying Investment Securities, also Residences, Building Lots, Farms, Manufacturing and Hotel Sites.

An ideal city for a HOME. Full of historic interest. Cost of living is cheap and climate delightful. Educational facilities are unsurpassed.

Garden produce of farms near Charleston is shipped to Northern and Eastern markets at good profits.

Exchange Banking & Trust Company,
CHARLESTON, S. C

FRANKLIN S. MILES, 207 Quarry Street, PHILADELPHIA, PA.
ESTABLISHED 1860.

ALL KINDS OF
Machine Screws
Made to Order and Carried in Stock.
WRITE FOR ESTIMATES.

HELP WANTED.

Advertisements under this head will be inserted hereafter at the rate of one cent a word for each insertion.

WANTED.—Salesmen for steam specialties, one of them new and a great saver of fuel and labor. Steam supply houses can make favorable terms on these goods. Address STEAM SPECIALTIES, 303 Wood St., Pittsburg, Pa.

WANTED.—Party to utilize a large and very fine body of hardwood timber in Southwest Georgia. Enquire of J. F. WILSON, Poulan, Ga.

SITUATIONS WANTED.

Advertisements under this head will be inserted hereafter at the rate of one cent a word for each insertion.

WANTED.—A position as superintendent, thoroughly familiar with design and construction of all class of buildings; heating and ventilating engineer and a sanitary engineer, or any position to which my experience would demand. Best of references. Address X. Y. Z., care Manufacturers' Record.

WANTED.—A position as superintendent by an experienced oil mill man. Age 33. Excellent reference. Address C. H. NICHOLS, 200 Alexander Street, Atlanta, Ga.

A NORTHERN MAN of excellent ability as a band saw filer, millwright and general all-round man, capable of managing men, desires position with some good mill who are in need of a man to fill any of the above requirements. At reference if desired. Address GEO. LANFORD, Neuse Hotel, New Berne, N. C.

The Hartzell Self-Draining Reel

is different from others, it is superior, as it is most convenient, it drains all the water out of the Hose after it has been reeled. No obstructions outside of this reel, to interfer with the free winding or unwinding of the Hose.

It is a nice ornament to any lawn. It greatly lessens the expense of keeping up a lawn, because the Hose is kept in order.

It is well mechanically made.

Your customers want THEM.
Will you supply them?

For descriptive circulars and price, address

The Hartzell Novelty Works, Alliance, O., U. S. A.

Have You Anything to Sell to Farmers?

If you have, the SOUTHERN FARM MAGAZINE will find new customers for you. The Magazine has in the last four years, as an authoritative periodical of information about agricultural capabilities and conditions in the South, built up an extensive circulation in the Northern, Western and Northwestern States among farmers who want to move South. As a result of its work there has been a constant and rapid increase in the volume of agricultural immigration to the South. With the recent enlargement of its work it becomes invaluable to all intelligent and progressive farmers of the South as a high class exponent of Southern agriculture. Its circulation is being vigorously pushed in all the fourteen Southern States. It is now, therefore, valuable as a means of reaching farmers not only throughout the North but also and especially in all parts of the South.

It will help you to sell Farm and Garden Implements and Machinery, Breeding Stock (Cattle, Horses, Sheep, Swine, Poultry), Stock Remedies, Farm and Stock Appliances and Specialties of every sort, Dairy Supplies, Seeds and Nursery Stock, Fertilizers, Household Articles and everything needed by the farmer or his family.

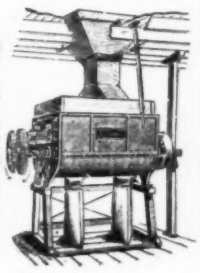
An advertisement in the Southern Farm Magazine will open up new channels of trade for you. TRY IT!

SOUTHERN FARM MAGAZINE,
Manufacturers' Record Building.
BALTIMORE, MD.

BELT HOOKS

SAWYER HARDWARE AND SUPPLY CO.
PAWTUCKET, R. I.

The BROUGHTON DRY MIXER FOR Hard Plaster, Cement, Paint, &c.
W. D. DUNNING
96 W. Water St., SYRACUSE, N. Y.



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DURABLE HEALTHFUL NOISELESS

20,000,000 square yards laid in eighteen years.

For plans and estimates apply to

THE BARBER ASPHALT PAVING COMPANY,
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We furnish **10,000 XX Good Quality White Envelopes**, printed with your corner card or address for $10.00—size 6¾. Send us your orders. *We print everything.*
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"Hurry Up" Letter Copying Machine.

NO BLOTTER BATHS, WET BRUSHES OR COPY BOOKS.
Always a Clean, Accurate, Uniform Copy.

Price of Machine $15.

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A problem old to settle.
No slimy rags nor blotters dank,
For I have something better;
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Write for Catalogue and Testimonials.

We have two complete systems of copying and filing letters, and make the most complete and modern **Letter Cabinet File** in existence.

The Piqua Copying Machine Co., Piqua, Ohio, U. S. A.

THE PECK-HAMMOND CO.

Formerly THE PECK-SMEAD COMPANY.

Heating, Ventilating and Sanitary Engineers,

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Operating in the Southern States.

CINCINNATI MEMPHIS ANNISTON HOUSTON ATLANTA LYNCHBURG, VA

Atlanta Terra Cotta Co.

ARTISTIC WORK.
PROMPT DELIVERIES.
LOW PRICES.

Address all communications to
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POMONA TERRA COTTA CO., Pomona, N.C.

Manufacturers
SEWER, DRAIN, CULVERT and TERRA-COTTA FLUE PIPE and FIRE BRICK.

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We are manufacturers of the new style power generators,

Ford Wind Engines for Power.
"Aeolus" Mill for Pumping.
Steel Towers, Pumps, Tank, Etc.

AEROSTATIC POWER CO.
1008 S. Fremont Ave., BALTIMORE, MD.
Send for Catalogue.

Subscribe to the Manufacturers' Record. Price $4 a year, or six months for $2.

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Has Used Our

Flint Paper,
Garnet Paper,
Emery Paper,
AND
Emery Cloth,
THE STANDARD SAND PAPERS,

FOR MORE THAN
Quarter of a Century.

YOU RUN NO RISK . . . .

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Glue, Curled Hair and Sand Paper.
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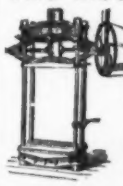
143 Milk Street, Boston.
182 Lake Street, Chicago.

The Boomer & Boschert PRESS



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Samples showing their beauty and quality sent on request. Write for Prices.

Made from pure natural white foothill clay, of delicate, soft tone, and uniform throughout. Will not change color. Specified by leading architects of New York and elsewhere for their serviceable and artistic qualities.

Powhatan Clay Mfg. Co.
RICHMOND, VA.
NEW YORK OFFICE: Townsend Bldg., 1123 Broadway.

SPECIAL Advertisements OF GENERAL Interest.

OPPORTUNITIES FOR INVESTORS.

The Mill Man

Will find it to His Advantage

to now Consider the Question of Locating his Factory on the line of the

Southern Railway

Incomparably the Leading System in the South.

IT RUNS THROUGH Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Tennessee and Kentucky.

And Gives the Greatest Variety of Openings and Opportunities for all Classes of Factories.

The Advantages of Raw Material, Labor, Cheap Sites, Cheap Building, Good Markets and Low Taxation (in some cases no taxation for a series of years) make regions along the **SOUTHERN RAILWAY** the best in the United States for Profitable Industries.

Permit us to show you what we have to offer.

Correspondence confidential.

M. V. RICHARDS,

Land and Industrial Agent, Southern Railway Co.

Washington, D. C.

THE COLUMBIA WATER POWER CO., COLUMBIA, S. C.

.....Offers for sale.....

UNLIMITED ELECTRIC POWER

In large or small units for manufacturing purposes. Columbia is in the centre of the cotton producing country. Low freight rates to all points. An ideal manufacturing location.

GEORGE WALLACE, General Manager, Boston Office, 53 State St., Room 608.
WM. C. HAWKINS, Managing Engineer, Columbia, S. C.

TWO MILLIONS ACRES LAND FOR SALE.

In Alabama, Florida, Mississippi and Texas.
Dry, Healthy, Fertile and Well Timbered.
YELLOW PINE LANDS A SPECIALTY.

Apply to or address JOHNSTON & NELSON, 241 E. German Street, BALTIMORE, MD.

Patent Grate Bar Right

FOR SALE.

New England and Western States for Sale.

Big income from royalty. One county in North Carolina pays $1,500 per year. Wanted manufacturing agents in every State to work on royalty. One hundred per cent. profit to manufacturers. Salesmen on commission or on lease as agent for specified territory. Big profit to business men. Saves 20 per cent. fuel.

Yorkville Roller Mills, Yorkville, S. C.: "They are great savers of fuel and give perfect satisfaction in every particular."

Geo. A. Gray and R. C. G. Love, of Gastonia, N. C.: "Works better than you claimed."

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IRON & STEEL,

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REPRESENTING Matthew Addy & Co. PIG IRON.

AGENT UNION MINING CO. MFRS. OF "Mt. Savage" Fire Brick

AGENT Dayton Coal & Iron Co. LTD. PIG IRON.

Parties desiring to locate manufactures are invited to investigate

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Good Climate, Water, Drainage. Elevation 1800 feet. On Norfolk & Western Railway, near Pocahontas Coal Fields. Inducements to responsible parties.

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Machinery to Manufacture

We have a thoroughly equipped Machine shop, Carpenter Shop and Foundry, and can do all classes of Machine Work very reasonable. Try us.

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FREDERICKSBURG, VA.

PAINT MACHINERY Mills, Mixers, Can Fillers, &c. Low prices, large assortment. Write for particulars. LYONS MACHINERY CO., Station B., No. 01, Cincinnati, O.

Complete Electric Plant

FOR SALE

at Morganton, N. C.

As commissioners, appointed by a decree of the Superior Court of Burke county, the undersigned will, on

MONDAY, AUGUST 1, 1898.

sell at public auction at Morganton, North Carolina, the complete electric plant, power-house, franchises and contracts of the Morganton Electric Light and Power Company. The Company has city contracts and does a large amount of commercial and residence lighting. System is the Edison three-wire, low voltage system, the dynamos are new and the whole plant is in good repair. Plant was erected at a cost of between $15,000 and $18,000. Town of Morganton has about 3000 inhabitants, is located in the mountains of North Carolina on Southern Railway, and is a noted health resort.

TERMS OF SALE: Half cash on day of sale; balance in six months, deferred payment to bear 6 per cent. interest, and title to be retained until balance of purchase money is paid.

Advantageous private bids will be considered until sale day.

For further particulars, address

F. H. BUSBEE, Raleigh, N. C.
W. C. ERVIN, Morganton, N. C.

FOR SALE.

An Opportunity for Good Investment.

A STOCK OF

Hardware, Stoves, Tinware, Crockery, Housefurnishing Goods, Agricultural Implements, Wagons and Buggies.

An established business for 25 years, in a fine section of agricultural county and in city of 4000 population, situated in Central Texas. Stock clean and well selected; will invoice about $25,000 to $30,000. Only one other hardware house in the city. Stock can be reduced to $20,000 by September 1st. Have building especially built for the business. Will sell or lease. Reason for selling on account of health and to close up business.

None but those who mean business need answer this. For further information address

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Mineral, Farming

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Timber LANDS.

Can Supply following:

Asbestos Lands.	Antimony.
Baryta.	Black Cypress Poles.
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Chrome Iron.	Corundum Lands.
Coal Lands.	Cotton Lands.
Copper Lands.	Cedar Lands.
Cypress Lands.	Farming Lands.
Fire Clay.	Fuller's Earth.
Granite Quarry.	Gold Mines.
Graphite Deposit.	Hemlock Timber Lands.
Iron Lands.	Juniper Lands.
Kaolin Mines.	Land for Colonies.
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Incorporate Your Business.

West Virginia Laws Most Liberal.
No Personal Liability. Non-Assessable Stock.
Plan mailed on application.
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Corporation Laws of West Virginia

Are the Best.

Charter is good in any state, no liability, signers furnished, reduced expense, consultation free.

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CHARLESTON, W. VA.

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FOR SALE.

In Eastern North Carolina, on Pamlico River. Capacity 12,000 to 15,000 feet per day. Entire new plant with all latest improvements, constructed last fall at cost of $8000. Latest improved Dry-Kiln. Grist Mill of 100 to 125 bushels per day capacity. Good wharf and navigable water for sea-going vessels.

One million and a-half feet of standing Poplar and Pine Timber on hand. Two hundred acres of first-class Farm and Timber Land included in mill property. Good residence and outbuildings. Delightful location, healthful, and plenty of good water. Property unencumbered.

Owner desires to go to Cuba, and will sell at sacrifice if sale is made at once. Apply to

STEPHEN C. BRAGAW,
Washington, N. C.

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Up-to-date Wheel Factory

in one of the best Southern cities. 5 railroads. Capacity 150 sets of wheels per day. 10,000 finished spokes per day. Best of material right at door at cord-wood prices. Address

P. O. BOX L,
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"Battle Ax" Hay Press.

Latest invention, Automatic, Ball Bearing, Compound Leverage, Self Contained. No gear wheels or springs. Full circle. Simple in construction, efficient in service. Write, prices, discounts.

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NEW DECATUR, ALA.

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If you have good farm, garden or orchard property, well located and reasonably priced, you can find buyers for it through the SOUTHERN FARM MAGAZINE. Every day numbers of Northern farmers are buying farms in different parts of the South for farming, trucking, fruit growing, dairying, stock breeding, poultry raising, or other agricultural pursuits. Within the last few years many hundred thousand Northern farmers have moved to the South.

The SOUTHERN FARM MAGAZINE dicusses every question likely to interest Northern farmers looking to the South. It deals with all matters pertaining to soil, climate and agricultural conditions and capabilities in the South. It publishes articles from the best informed and most trustworthy sources on farming, stock raising, dairying, truck farming, fruit growing and every agricultural pursuit. It publishes descriptions of different parts of the South, elaborately illustrated with the finest half-tone engravings of farm scenes, typical farm homes, growing crops, picturesque scenery, views in the cities and towns, photographs of prominent Southern men, etc. It records every month the progress of the immigration movement in every part of the South.

In a word, it seeks to make known and emphasize in the clearest and most interesting and intelligible way every phase of the South's agricultural and home advantages and resources.

Advertisements of farm property in the SOUTHERN FARM MAGAZINE are placed directly before people who are seeking information that will enable them to decide where and what to buy in the South.

Let us quote you prices. The rates are very low.

SOUTHERN FARM MAGAZINE,
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FOR SALE.

Four 5 H. P. Electric Motors and Three 50-light Incandescent Dynamos.

Absolutely new and splendid machines for $85 each.

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Bargains in— Machinery FOR IMMEDIATE DELIVERY

FOR SALE.

8 Cast Iron Tanks, 8' long, 4' wide, 2' high.
Steam Pump, 7" bore x 7" stroke.
Wilbraham Bros. Slide Valve Engine, 16x31".
1 each Slide Valve Engine, 28x42" and 20x40".
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Westinghouse Engine and Dynamo.
Boiler, length 16', diameter 52", 28 4" tubes.
4 Double Deck Wetherill Boilers, 16'x48", 40 3¾" tubes. 2 Locomotive Boilers, 80 H. P.
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1 30-ton Iron Steam Crane. 6 Jib Cranes.
3 Traveling Cranes. 3 Harrington Hoists.
Pair Hydraulic Hoists. 7 Iron Vises.
Grindstone and Bas n. Emery Wheel and Stand.
Two New Dudgeon F'ue Expanders.
17 Adjustable Hangers, 1¾" shafting.
Fairbanks Wagon Scale—1 10,000 lbs.; 14,000 lbs.
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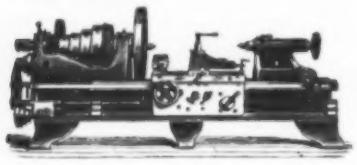

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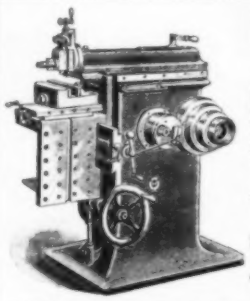

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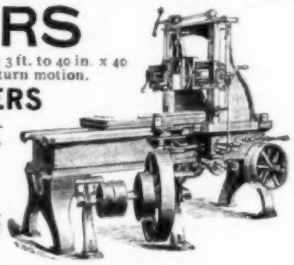

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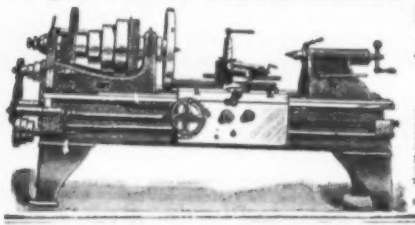

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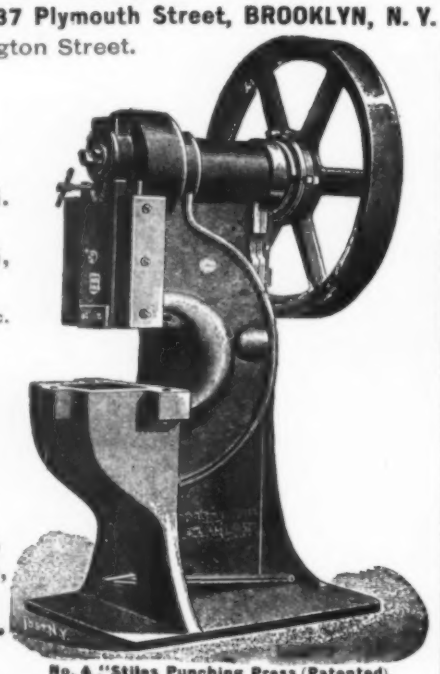

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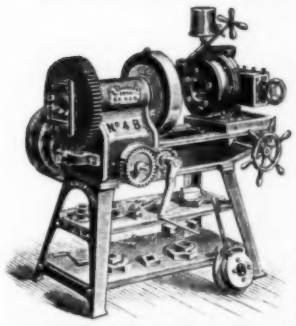

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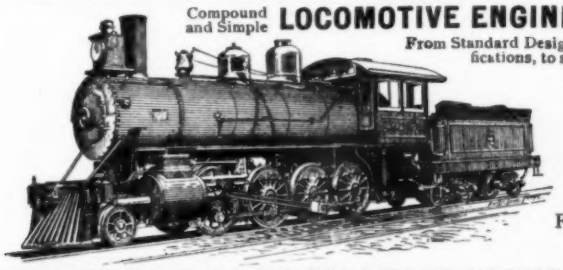

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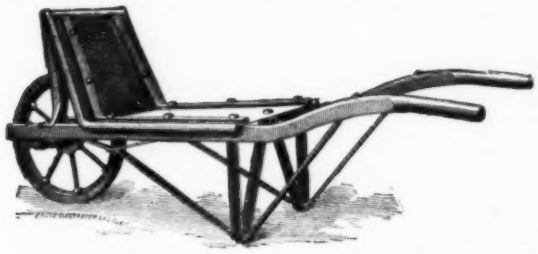

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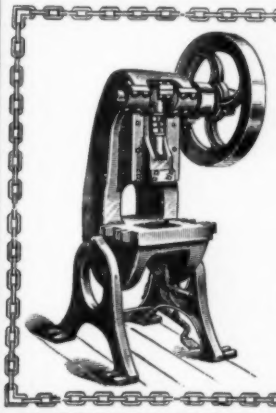

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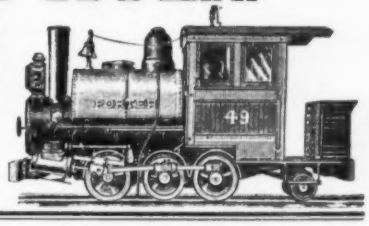

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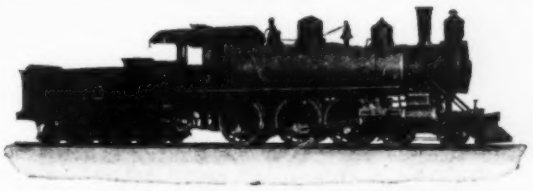

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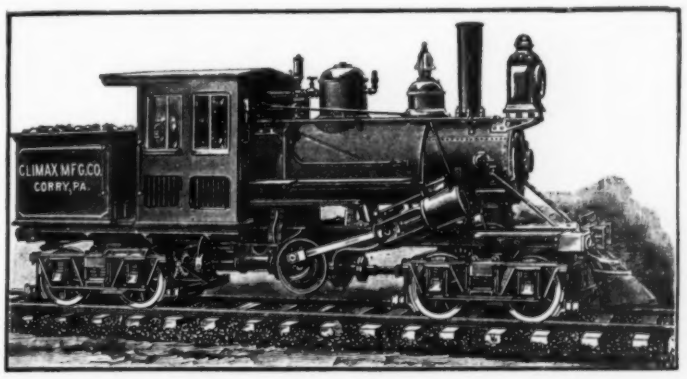

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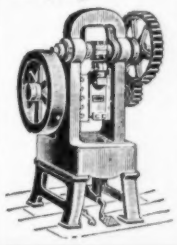

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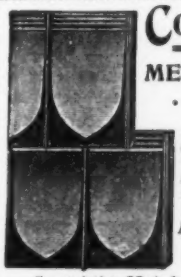

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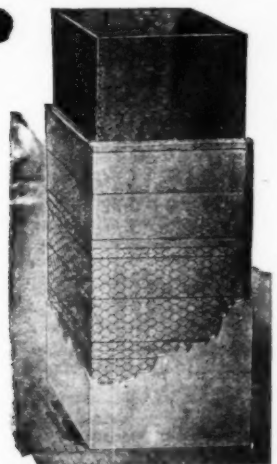

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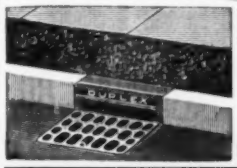

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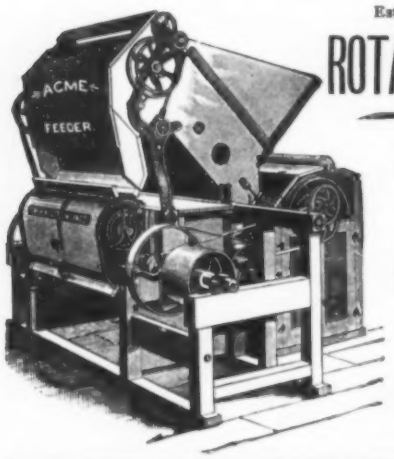

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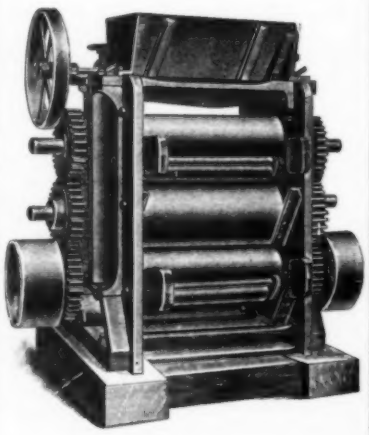

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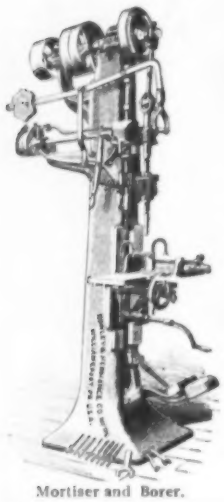

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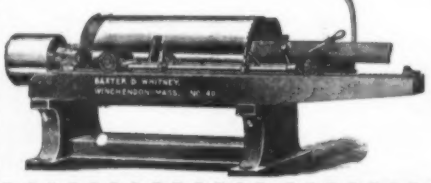

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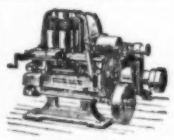

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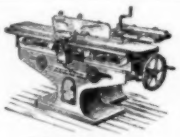

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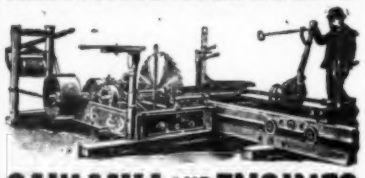

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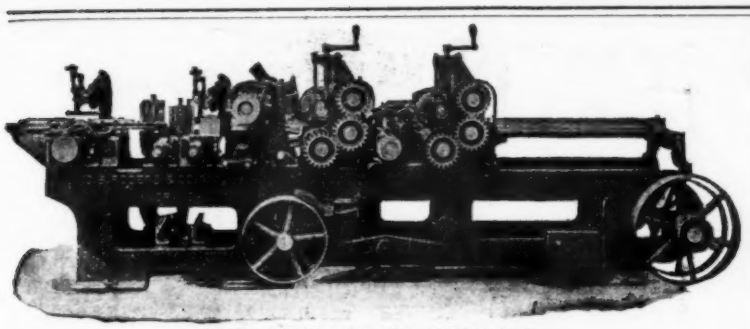

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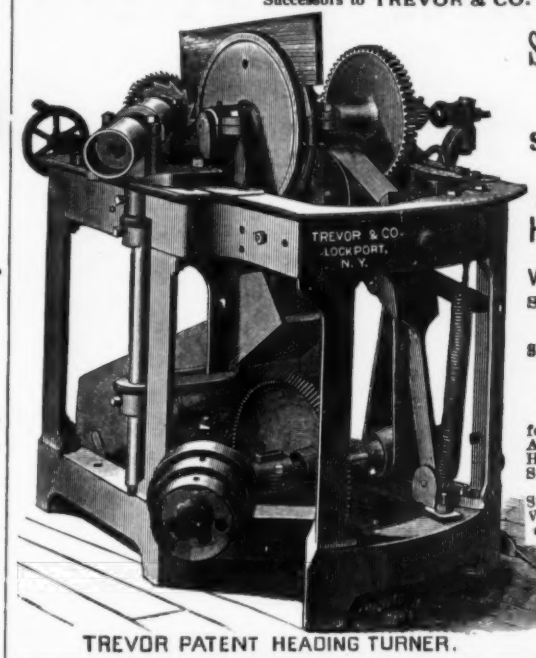

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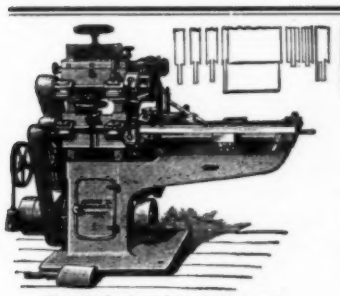

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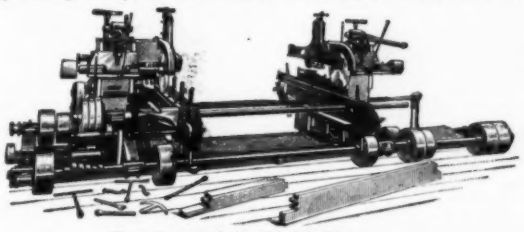

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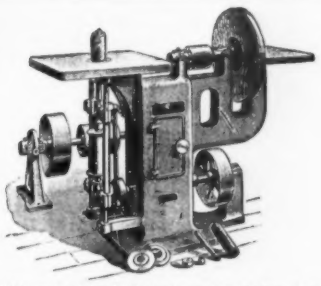

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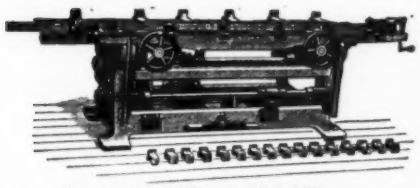

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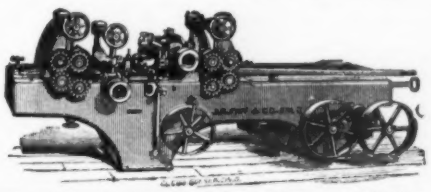

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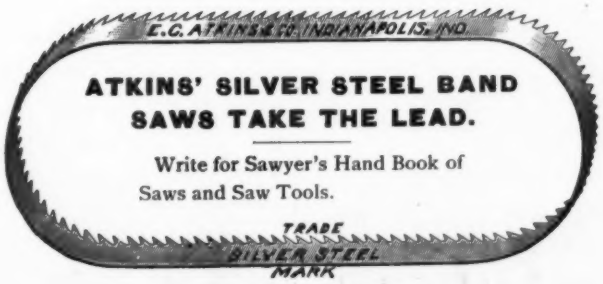

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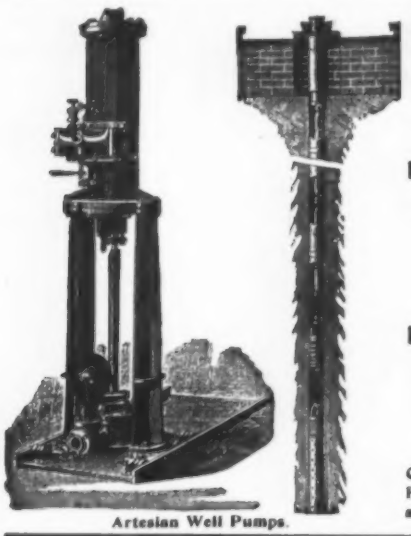

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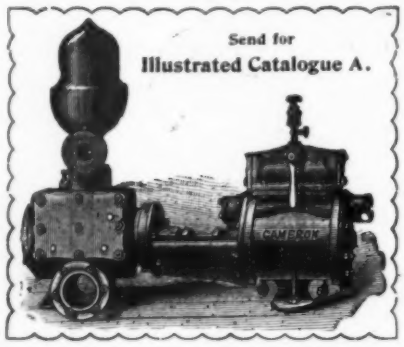

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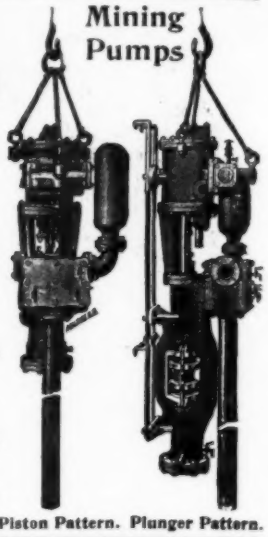

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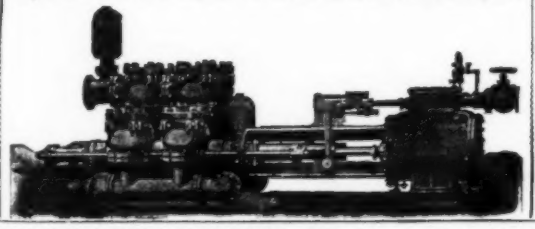

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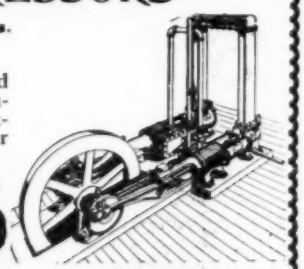

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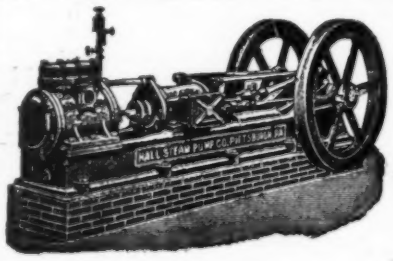

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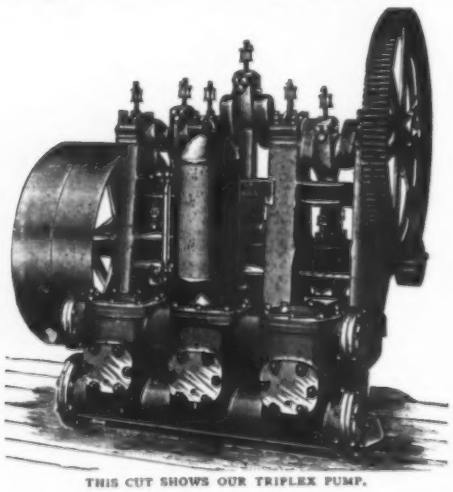

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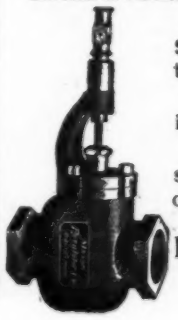

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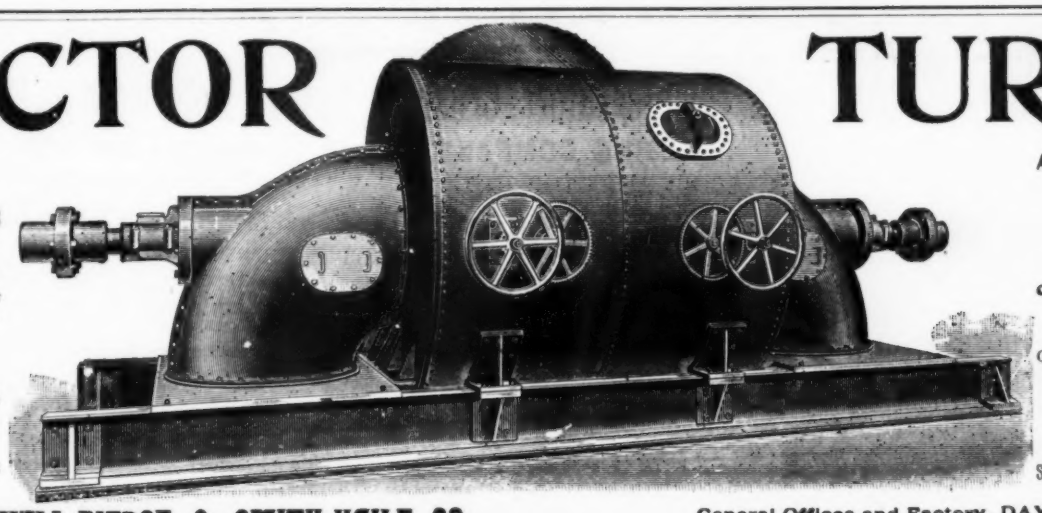

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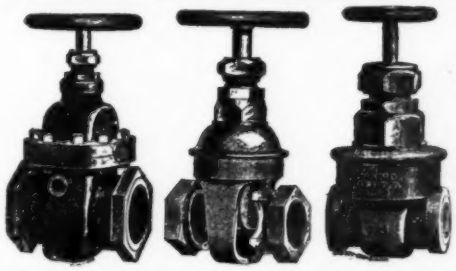

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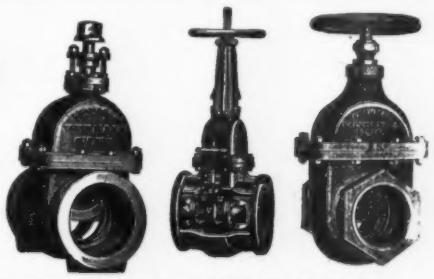

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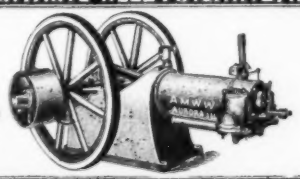

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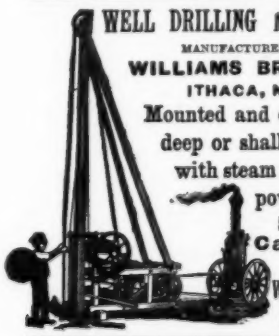

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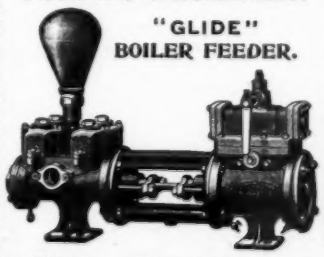

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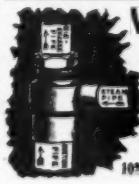

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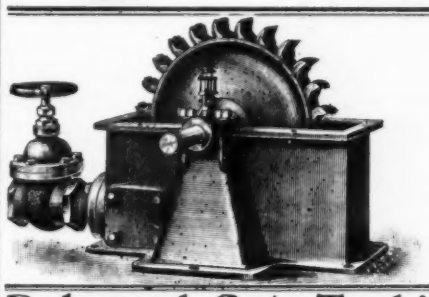

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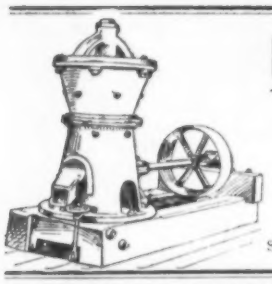

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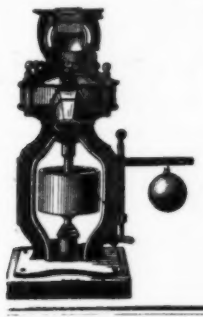

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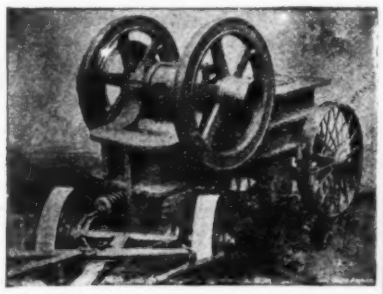

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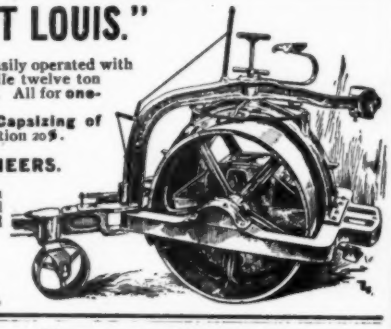

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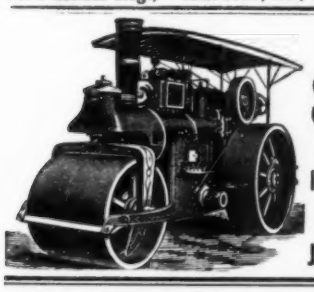

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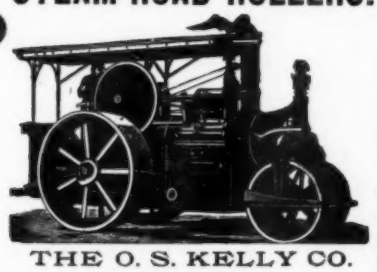

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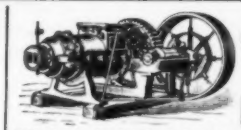

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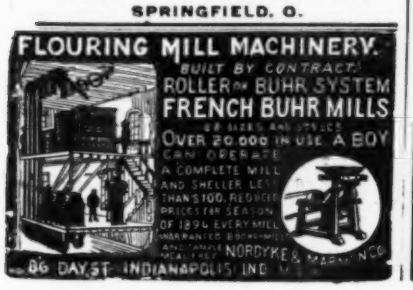

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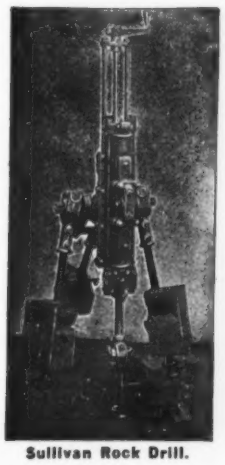

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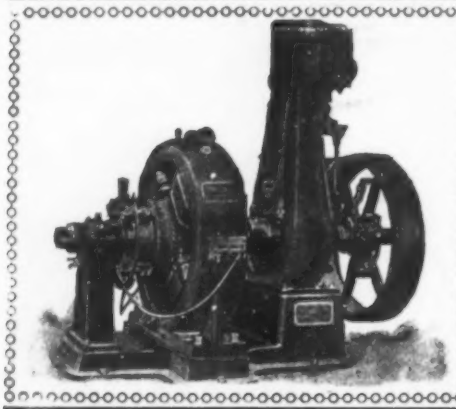

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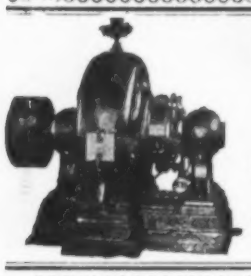

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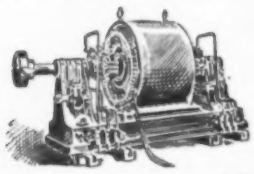

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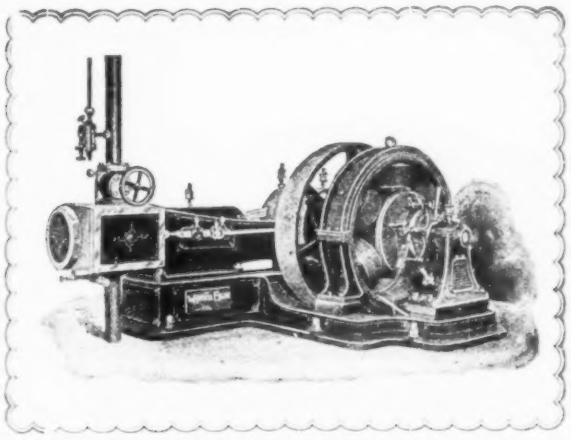

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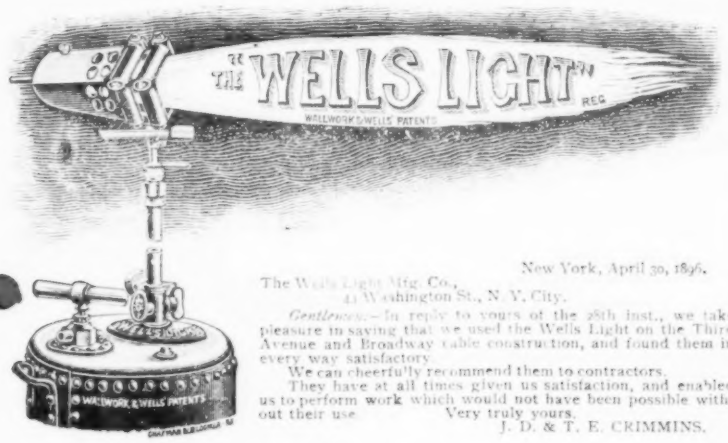

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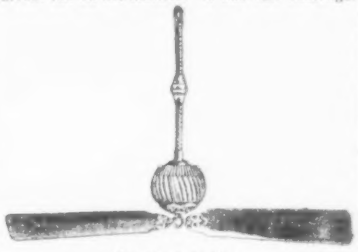

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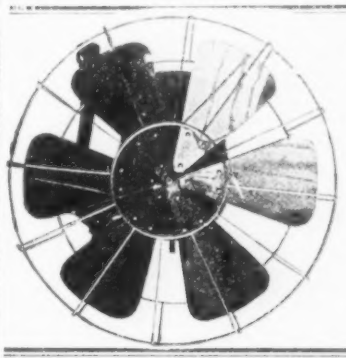

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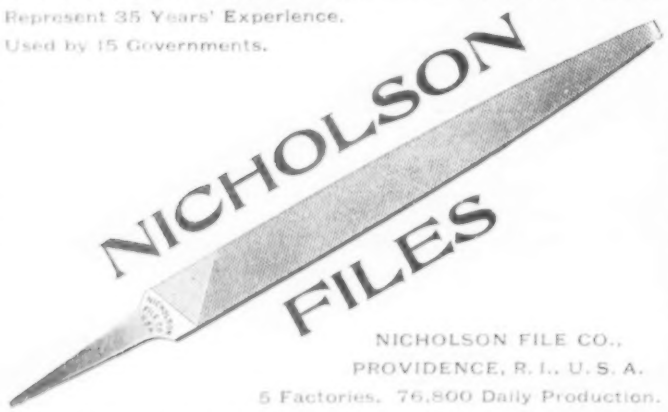

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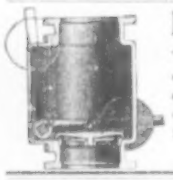

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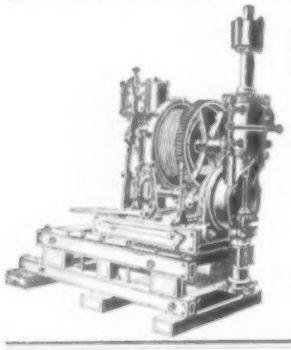

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